DOCUMENT RESUME

ED 340 515 PS 020 267

AUTHOR	Hargreaves, Andy; Earl, Lorna
TITLE	Rights of Passage: A Review of Selected Research about Schooling in the Transition Years.
INSTITUTION	Ontario Dept. of Education, Toronto.
REPORT NO	ISBN-0-7729-7700-3
PUB DATE	90
NOTE	241p.
AVAILABLE FROM	MGS Publications Services, 880 Bay Street, 5th Floor, Toronto, Ontario, Canada M7A 1N8. Also available in French under the title, "Droits de passage."
PUB TYPE	Information Analyses (070)
EDRS PRICE	MF01/PC10 Plus Postage.
DESCRIPTORS	Adolescent Development; *Curriculum Design; Educational Change; Educational Environment; *Educational Strategies; Elementary Secondary Education; Evaluation Problems; Foreign Countries; Instructional Improvement; School Organization; Teaching Methods; *Transitional Programs
IDENTIFIERS	Canada; Ontario; *School Culture

ABSTRACT

This review of literature and research concerns innovative programs and services for students in the transition between elementary and secondary schools. Chapter 1 identifies the areas of focus, methodology, context, guiding assumptions, and report structure. Chapter 2 looks at the characteristics and needs of early adolescence and discusses the cultures of elementary and secondary schooling, and the transition between these two cultures. Chapter 3 focuses on the process of transition itself: the problems of transition (anxiety, adaptation, and curriculum continuity), and the responses to transition (school choice, planning, record keeping, and reorganization). Chapter 4, which concentrates on the curriculum for the transition years, covers curriculum problems, the process of restructuring the curriculum, the core curriculum, and instructional strategies (team teaching, interdisciplinary options, cooperative learning, learning styles, and experiential career education). Chapter 5 deals with assessment and evaluation, discussing definitions, purposes, patterns, and alternative strategies. Chapter 6 looks at issues concerning Franco-Ontarian schools. Chapter 7 draws together the findings of the review and identifies key issues. A reference list of about 500 items is included. (SH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☐ This document has been reproduced as received from the person or organization originating it.
☒ Minor changes have been made to improve reproduction quality.
● Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

RIGHTS OF PASSAGE: A REVIEW OF SELECTED RESEARCH ABOUT SCHOOLING IN THE TRANSITION YEARS

Principal Investigators
ANDY HARGREAVES
LORNA EARL

Research Officer
[illegible]

Research Assistants
MICHAEL FOLEY
[illegible]

[illegible]
[illegible]
[illegible]

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Ontario Ministry of Education
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

This research project was funded under contract by the Ministry of Education, Ontario. It reflects the views of the authors and not necessarily those of the Ministry.

Ontario
Ministry of Education

BEST COPY AVAILABLE

RIGHTS OF PASSAGE: A REVIEW OF SELECTED RESEARCH ABOUT SCHOOLING IN THE TRANSITION YEARS

Principal Investigators
ANDY HARGREAVES
LORNA EARL

Research Officer
MARGARET OLDFIELD

Research Assistants
MICHAEL FOLEY
TIIU RAUN
BOB REID
VOULA SAMARA
JOYCE SCANE

This research project was funded under contract by the Ministry of Education, Ontario.

It reflects the views of the authors and not necessarily those of the Ministry.

QUEEN'S PRINTER FOR ONTARIO, 1990

Order Information:

MGS Publications Services
880 Bay Street, 5th Floor
Toronto, Ontario
M7A 1N8
(416) 965-6015
(Toll Free) 1-800-268-7540
(Toll Free from area code 807,
ask operator for Zenith 67200).

Order must be accompanied by a
cheque or money order payable
to the Treasurer of Ontario

Canadian Cataloguing in Publication Data

Hargreaves, Andy.
Rights of passage

Issued also in French under title: Droits de passage.
ISBN 0-7729-7700-3

1. Education, Elementary. 2. Education, Secondary.
3. Articulation (Education) 4. Middle schools.
I. Earl, Lorna M. (Lorna Maxine), 1948- .
II. Ontario. Ministry of Education. III. Title.

LB1626.H37 1990 373.2'36 C90-092546-9

ACKNOWLEDGEMENTS

In putting together this literature review over a relatively short time period, we have received help from a large number of people who have supported us in our efforts to collect, collate, and make sense of the vast quantity of available material.

- Marian Press, from the Research and Information Service for Education unit at OISE, has adeptly undertaken and co-ordinated on-line computer searches for the project.

- Dr. John Ainley, from the Australia Council of Education Research, promptly and efficiently supplied a review of literature on the Transition Years for Australia and New Zealand.

- Avina Skolnik has provided invaluable secretarial support for the project, not only in typing and entering project materials, along with the final report, but also in co-ordinating and liaising with a large and dispersed project team.

- Clara Ho and Margaret Jackson, of the Scarborough Board of Education Research Centre, provided technical assistance and advice.

- Selected members of the Association of Educational Researchers of Ontario (AERO) provided many documents from Ontario school boards.

TABLE OF CONTENTS

PAGE

ACKNOWLEDGEMENTS iii

TABLE OF CONTENTS v

CHAPTER ONE -- BACKGROUND 1
  Focus 3
  Methodology 5
  Context 6
  Guiding Assumptions 10
  The Structure of This Report 12

CHAPTER TWO -- TWO CULTURES OF SCHOOLING? 17
  The Characteristics and Needs of Early Adolescence 19
    What is Adolescence? 19
    Development and Maturation During Adolescence 19
    Adolescent Identities and Values 20
    Variations Among Adolescents 24
    Summary of the Needs and Characteristics of Adolescents 25
  Cultures of Schooling 26
    Transition as a "Rite de Passage" 26
    Two Cultures of Schooling? 28
    Elementary School Culture 32
    Secondary School Culture 36
  Transition and Continuity 47

CHAPTER THREE -- THE TRANSITION PROCESS 51
  Problems of Transition 53
    Anxiety 54
    Adaptation 59
    Curriculum Continuity 63
    Summary -- Transition Problems 65
  Responses to Transition 65
    Choice of Secondary School 66
    Planning, Communication, and Joint Work 67
    Recordkeeping 73
    Induction Schemes 76
    Institutional Reorganizations 78
    Secondary School Restructuring 81
    Summary -- Responding to the Transition Process 89

CHAPTER FOUR -- CURRICULUM AND INSTRUCTION 91
  The Problem of Curriculum 93
      The Problem of Relevance 96
      The Problem of Imagination 98
      The Problem of Challenge 100

TABLE OF CONTENTS (Continued)

PAGE

CHAPTER FOUR -- The Problem of Curriculum (Continued)

    Summary -- Curriculum Problems 101
  Restructuring the Curriculum 101
    Background 101
    Secondary School Academic Orientation 103
    Summary -- Academic Orientation 107
  Core Curriculum 108
    Criteria for Justifying a Core Curriculum 108
    Structure of a Core Curriculum 112
    Summary -- Core Curriculum 120
  Instructional Strategies 120
    Team Teaching 121
    Interdisciplinary Courses and Mini-Options 123
    Co-operative Learning 124
    Learning Styles 126
    Experiential Career Education 126
    Summary -- Instructional Practices 128
  Conclusions and Implications 128

CHAPTER FIVE -- ASSESSMENT 135
  Assessment and Evaluation 137
    Definition of Assessment 140
    Purposes of Assessment 143
  Traditional Patterns of Assessment 146
    Effects of Traditional Assessment 148
    Traditional Assessment Techniques
        and the Purposes of Assessment 159
  Alternative Assessment Strategies 162
    Performance-Based Assessment 166
    Portfolios and Personal Records 171
    Records of Achievement 174
  Conclusions 178

CHAPTER SIX -- FRANCO-ONTARIAN SCHOOLS 181
  Background 183
  Context: Community Attitudes and Pressures 185
  Adolescence and Transition 191
  Curriculum and Instruction 193
  Assessment 198
  Conclusion 200

CHAPTER SEVEN -- KEY ISSUES IN THE TRANSITION YEARS:
  THE RIGHTS OF PASSAGE 203
  Context 205
  Adolescence and Transition 206
  Curriculum and Instruction 209

TABLE OF CONTENTS (Continued)

CHAPTER SEVEN -- Key Issues in the Transition Years
The Rights of Passage - (Continued)

PAGE

Assessment 210
Conclusions and Implications 214

REFERENCES 217

BACKGROUND

FOCUS

On being awarded this research contract in November 1989, the Principal Investigators drew together and worked with a team of five research officers and assistants to undertake the selected review of the literature. In consultation with Ministry staff, the main areas of focus for the review were identified as:

- The key characteristics of elementary schools and secondary schools and their impact on student learning and development. The purpose of this focus was to develop a sense of what students in the Transition Years were transferring to and from; of what they were in transit between.

- The transition process itself, as it is understood and experienced by students, and as it is managed by teachers and administrators.

- The curriculum in the Transition Years -- especially issues surrounding the concept of a core curriculum, the criteria underpinning such a curriculum, and the particular forms that a core curriculum can take.

- Innovative strategies of assessment and evaluation which support and are integrated into the learning process itself during the Transition Years, rather than ones which are merely undertaken as a kind of judgement, when the learning is over.

The project team was also asked to look at French Language issues and their implications for the Transition Years. A review of the relevant research in this area is therefore presented as chapter 6.

Two areas of inquiry which are otherwise of great importance for the Transition Years were deliberately excluded from the review. We did not deal separately with Guidance because this is the focus of a parallel project being conducted for the Ministry; nor did we review all the relevant literature on streaming and destreaming since numerous reviews on this subject already exist in Ontario and are readily available (e.g., Earl et al. 1989; Leithwood, Lawton, and Hargreaves 1988). We do deal with Guidance and destreaming issues to some extent within the main report but only insofar as they affect and are affected by other innovations, such as core curriculum and new assessment strategies in the Transition Years.

Given the timescale of the project, and the range of issues included within it, the review is necessarily selective rather than exhaustive. It is designed to identify key themes within each of the areas of focus. The team concentrated its search on Canada, the United States, and Great Britain. Dr. John Ainley from the Australian Council for Educational Research was engaged as a consultant to locate and review research literature on transition to secondary school in Australia and New Zealand. Material from other countries is also included in the review, to the extent that we could overcome accessibility problems and language difficulties.

Although a literature review such as this relies heavily on professional journals and much of the really current research has not been published because of the publication time lag, we believe that we have been able to tap much of this cutting edge thought.

There is one worrisome area, however. It is clear from research done since the early 1980s that secondary schools are changing rapidly. We have tried to indicate areas where there is evidence of change in Ontario schools but realize that there may be much more for which documentation is not readily available. While we are aware of many cases of innovative practice in Ontario, in the short time available we have been able to locate little hard data on either how widespread or effective such practice is. Consequently, in many cases, this has led us to rely more exclusively than we would like on literature published outside Ontario.

Accordingly, we caution readers in presuming that research results reported in such literature can be generalized to the Ontario situation. Until more extensive Ontario data on the Transition Years are available, we would ask that readers of this report use the material along with their own and their colleagues' existing knowledge and experience in a critical and reflective way.

Notwithstanding the above caution, research projects undertaken for the Ministry in parallel to this one will provide some documentation of the nature and distribution of innovative practices in Ontario schools. Our hope is that this document will serve as a catalyst in Ontario schools to stimulate debate and evaluation, encourage documentation, establish goals for school improvement, and identify needs for further research.

METHODOLOGY

Four basic procedures were used to conduct the review:

- Extensive library searches, including computer searches through such systems as ERIC, EDUQ, ONTERIS, Sociology Abstracts, and Psychology Abstracts, as well as searches of printed indexes, journals, and other documentary sources.

- Acquisition of materials from various centres, associations, and institutions with particular interest and expertise in the Transition Years, including the American National Middle Schools Association; the Center for Early Adolescent Education in Chapel Hill, North Carolina; the Saskatchewan Middle Years Association; and the Centre for Research on Elementary and Middle Schools at Johns Hopkins University.

- Collection of some local reports and in-house documents produced by certain school boards in the province and in Canada more widely.

- Commissioning of a consultant, Dr. John Ainley, in Australia to identify and review material relevant to the Transition Years in Australia and New Zealand.

All items were entered on a standardized bibliographic form indicating the author, date, source, publisher, the nature of the material (e.g., research report or book), the topic area covered, country of focus, a summary of results, and an assessment of any conclusions and implications.

The main report does not itemize findings of individual projects in great detail. Rather, it takes the form of a broader narrative summary, citing studies which bear on the points being made.

CONTEXT

The recommendations of the Select Committee and the announcements in the Throne Speech did not come as a surprise to the educational community in Ontario. In fact, changes in Ontario education since 1950 have contributed to these decisions, and many related activities have already been initiated in recent years in Ontario schools.

Historically, Ontario has had a highly structured school system with clear differentiation between the elementary and secondary levels:

- In the 1950s, elementary education covered kindergarten to Grade 8 and secondary education covered Grades 9-13. Most students were directed early in their school careers towards employment and a few were prepared for entry to higher educational institutions.

- During the 1960s, the *Living and Learning* report (Hall and Dennis 1968) set the stage for a very different form of elementary education. It advocated a fundamental shift in education toward providing equal access to appropriate learning experiences for every child and providing a child-centred learning continuum that invites learning by individual discovery and inquiry. These philosophical shifts resulted in some beginning changes in the way elementary students were taught in Ontario schools. Most notably, in the 1970s, the Ministry documents *Education in the Primary and the Junior Divisions* and *The Formative Years* began to translate the Hall-Dennis report into classroom practice. Ontario began to build open-area elementary schools and child-centred learning became the focus of much in-service training and discussion. In secondary schools, during the 1960s, there were very few changes. The Robarts Plan specified four- and five-year programs in Arts and Sciences and Business and Commerce and two-, four-, and five-year programs in Science, Technology, and Trades. This structure still clearly differentiated students as they entered Grade 9 and directed two- and four-year students into employment and five-year students towards higher education. Early in the 1970s, there was some concern that the rigidity of the Robarts Plan was limiting the opportunities for all but five-year students. Accordingly, the province adopted HS1, which instituted a structure of "credits" that allowed students to individualize their timetables. In reality, however, most students continued to choose a standard slate of courses.

- In 1984, the Ministry released *Ontario Schools: Intermediate and Senior Divisions* (OSIS). OSIS addressed several issues that are particularly relevant to the current review:

  - OSIS spanned both the Intermediate and the Senior Divisions so it drew attention to the transition between elementary and secondary schools and the need to improve this transition.
  - OSIS specified that "the major purpose of a school is to help each student develop his/her potential as an individual and as a contributing, responsible member of society who will think clearly, feel deeply and act wisely."
  - OSIS indicated that courses could be given at three different levels of difficulty -- basic, general, and advanced -- to ensure that all students receive appropriate instruction. It also reinforced the notion that students could take courses at more than one level of difficulty to allow them the greatest access.

- When OSIS was first released, most schools or school systems concentrated on the "nuts and bolts" of OSIS implementation. They focused on scheduling, identifying which credits were acceptable, creating codes of behaviour, and writing new second-generation guidelines and/or courses of study. At the same time, most school boards established "general level committees" and began to explore ways of improving secondary education for non-academic students.

- Ontario itself has changed considerably in recent years. Schools in contemporary Ontario are being confronted with a large number of competing expectations and points of view at a time when education is increasingly important as a vehicle for access to employment. The population is becoming very culturally diverse; more married women are employed; more students have part-time jobs; and employers and parents have wide-ranging expectations. This presents further challenges to the educational system.

◆ The Ministry focused attention on the problem of "school dropouts" during the 1980s, and commissioned several research studies. In addition, George Radwanski was assigned to do a study entitled *The Ontario Study of the Relevance of Education and the Issue of Dropouts* (1987).

◆ About the same time, the Ministry provided schools and school systems with a resource guide called *Curriculum Management* (Ontario Ministry of Education 1988a). This document and another, *Planned Educational Change: A Manual for CRDI Concepts and Procedures* (Leithwood 1986), have provided educators with a framework for thinking about and organizing change in schools.

◆ There is some evidence, in recent years, that there has been a change in Ontario schools. Most school boards have adopted a child-centred philosophy at all levels, at least in principle, and elementary schools have sought to become more holistic in their orientation. Many systems have created senior public or junior high schools to try to address the particular needs of young adolescents. Secondary schools are less concerned with curriculum renewal and more involved in implementation, not only of particular guidelines but also of varied and innovative teaching/learning strategies (Earl 1989a). A large number of documents have been produced, not by the Ministry or some outside publisher, but by teachers working in schools, that are specifically directed towards helping other teachers expand and vary their repertoire of skills (e.g., "Making the Grade", "The General Store", "Together We Learn", "The Writer's Craft", "4MAT modules"). Professional development days, conferences, and in-school committees are addressing issues like integrated curriculum, small-group co-operative learning, learning styles, and alternative methods of student evaluation.

- At the same time, the dropout rate remains relatively stable (although it is extremely difficult to get accurate figures) and more and more students are selecting advanced level courses.

It is against this background that Ontario educators received the recommendations of the Select Committee and the Throne Speech.

GUIDING ASSUMPTIONS

This review of literature and research concerning innovative programs and services for students in the Transition Years is guided by the following three basic assumptions:

- ***Programs and services for the Transition Years should primarily be based on the characteristics and needs of early adolescents.***

This means that those programs and services should not be determined by the inertia of historical tradition that has come to define our existing understandings of "proper" curriculum subjects (Goodson 1988; Tomkins 1986) and of valid, workable methods of instruction (Cuban 1984; Curtis 1988; Westbury 1973). It also means that Transition Years programs and services should not be primarily shaped by the curriculum and credential requirements of what is to follow in the Specialization Years, as is currently the case (Stillman and Maychell 1984; Gorwood 1986; Hargreaves 1986). Rather, the different stages and sectors of the educational service should work together in a partnership of equals, building education as a continuous process which effectively meets the needs of young people at each stage of their development.

The main purpose of the Transition Years, we assume, therefore, is not to prepare students for high school but to help make education a continuous process addressing the personal, social, physical, and intellectual needs of young people at each particular stage in their development.

- ***The different aspects of schooling (i.e., curriculum, instruction, Guidance, assessment, and staff development) should be dealt with as an integrated system, not as isolated subsystems, each with its own logic, traditions, and particular interests.***

It is little use encouraging teachers to be more flexible and learner-centred in their approaches to instruction, if they are left to work within traditional, judgemental, fact-centred systems of assessment and evaluation. There is little value in asking teachers to be more experimental and to take risks in their strategies of instruction, when they work within closely defined, content-laden curriculum guidelines that put a high premium on coverage of content. There is also little point in encouraging all Transition Years teachers to take more responsibility for the personal and social development of their students, unless the responsibilities of what is presently understood as Guidance are distributed more widely throughout the school (Hargreaves et al. 1988; Lang 1985).

We assume, in other words, that programs and services in the Transition Years are best approached as an integrated system if improvements are to be effective; that curriculum, assessment, instruction, Guidance, staff development, and the like are best considered together in terms of the ways they can support the learning and development of early adolescents.

- ***The development and implementation of any changes should be based upon, and actively take account of existing theories and understandings of educational change*** (Fullan 1982, forthcoming; Leithwood (ed.) 1986).

Simple and relatively superficial change, in terms of adopting new curriculum guidelines, installing computers, reducing class sizes or implementing destreaming, is comparatively easy to prescribe. Complex and enduring change, in terms of new strategies of instruction or greater attention to students' personal and social needs, is not (Miles and Huberman 1984). In these matters, teachers do not change because they are told to, or even as a result of a few "quick" in-services (Fullan and Hargreaves, forthcoming). Responsiveness to change, interest in change, and willingness to change, rather, are deeply rooted in teachers' own personal and professional development (Hunt 1987) and in the extent to which their colleagues, their principals, and their schools as a whole can provide an environment which supports and promotes change. In such schools, change is most effective not when it is seen as a problem to be fixed, an anomaly to be ironed out, or a fire to be extinguished. Particular changes are more likely to be implemented in schools where teachers are committed to norms of continuous improvement as part of their overall professional obligations (Little 1984; Rosenholtz 1989). We therefore assume that if it is to be effective, change in the Transition Years, like any complex and lasting change, must address the deeper, more generic issues of staff development, school leadership, and the culture of the school as a supportive community committed to continuous improvement. Without that, it is unlikely that deep change will extend much beyond paper into practice.

THE STRUCTURE OF THIS REPORT

This report is organized into six further chapters. Chapter 2 looks at the characteristics and needs of early adolescence; the nature of the transition that young people are making in early adolescence in themselves, in their social relationships, and in their schools; and the kinds of school organization and school culture in elementary and secondary schools, respectively, that students are in transit between during this period of their lives. Chapter 2 asks what the characteristics and needs of Transition Years students are, and to what extent and in what ways the organization and culture of elementary and secondary schools meet these needs.

Chapter 3 focuses on the process of transition itself. It analyses research on the experience of transition to secondary school; on the nature and duration of the anxieties among students that precede and accompany that experience; on the degree of continuity and discontinuity that is characteristic of school transition; and on the desirable and undesirable aspects of these continuities and discontinuities. The remainder of the chapter describes and evaluates programs and innovations that have been tried or suggested in Ontario and elsewhere to manage and improve the experience of transition for young people.

Chapter 4 concentrates on the curriculum for the Transition Years. It analyses the origins and effects of the current secondary school curriculum and looks at how well that curriculum meets the needs of students in the Transition Years. The case for a core curriculum is assessed and criteria for establishing different kinds of core curricula are reviewed. Throughout this chapter, the curriculum is not considered in isolation, as if it were a self-contained thing. Since organization of the curriculum has implications for many other aspects of schooling that influence the quality of education that students get in the Transition Years (e.g., grouping, the availability of counselling, and the number of teacher contacts that students have), this chapter includes a discussion of the relationship between the curriculum and other aspects of school. Chapter 4 also addresses the issue of instructional strategies that are appropriate for the Transition Years.

Chapter 5 deals with assessment and evaluation. Assessment is the activity that is often claimed to determine almost everything else in school -- "the tail that wags the curriculum dog". The different purposes of assessment are reviewed in this chapter, as are the kinds of strategies available for fulfilling them. Current widely used assessment strategies are reviewed and analysed in terms of their capacity to support or inhibit the meeting of students' needs in the Transition Years. The chapter then describes and analyses a range of innovative assessment strategies that are not isolated from the learning process, but integrated into it -- strategies that are a central part of the learning process itself.

Chapter 6 looks at French Language issues and their implications for the Transition Years.

Chapter 7 draws together the findings of the review and identifies key issues that might be considered for policy deliberation, as well as issues warranting further research.

It may strike some readers as curious that there is no separate chapter on streaming, destreaming, and student grouping in general. The reason for this is partly practical. As we mentioned earlier, extensive reviews of the streaming literature are readily available elsewhere. But there is another deeper reason. In many ways, "destreaming" is a distraction from the fundamental issues of providing effectively for students in the Transition Years and giving all students sufficient opportunity to learn. Destreaming really only deals with the issue of putting bodies into rooms. One of the reasons why much of the research on the academic effects of destreaming is inconclusive is that it does not address what is done with those bodies once they have been placed in classrooms. Students in destreamed classes can be taught many different things in many (curriculum) and *how* they are taught (instruction). More important than the *management* of destreaming is the *meaning* of it for those who work with destreamed classes. For this reason, we view destreaming as a preliminary or subsidiary issue and would encourage our readers to move beyond it to the essential issues of curriculum and instruction. Without agreed-upon policies on curriculum and instruction, discussion about destreaming has little meaning at all. In policy terms, destreaming is now a *fait accompli*. It is time to sharpen the focus, time to move on. The purpose of this review is to assist the educational community in that difficult, yet profoundly important, process.

THE CHARACTERISTICS AND NEEDS OF EARLY ADOLESCENCE

What is Adolescence?

If the prime purpose of education in the Transition Years is to provide programs and services based on the needs and characteristics of early adolescence, it is important to have an understanding of the nature of adolescence.

Adolescence itself, as it is understood and experienced in most advanced industrial societies, is the transition from childhood to adulthood, beginning with puberty. It is a period of development more rapid than any other phase of life except infancy. Adolescent development is neither singular nor simple, and aspects of growth during adolescence are seldom in step with each other, neither within individuals nor among peers (OSIS 1989; TFEYA 1989). Early adolescents (aged 10 to 14) are complex, diverse and unpredictable (Shultz 1981; Thornburg 1982). At this time in their lives, young people are no longer children, nor are they adults. For the first time many remarkable things begin to occur in adolescents' lives. They discover that their bodies are changing dramatically; they begin to use more advanced mental abilities; and they become extremely conscious of their relationships with others (Palomares and Ball 1980).

Development and Maturation During Adolescence

Adolescence is a time for enormous physical changes characterized by increases in body height and weight, the maturation of primary and secondary sex characteristics, and increased formal mental operations. As these changes occur, adolescents are increasingly aware of changes in their bodies and must adjust psychologically to these changes within themselves and to the developmental variations that occur within their adolescent group. There is a strong concern among adolescents with how they match up to common behavioural and physical stereotypes (Thornburg 1982). They also compare themselves to their peers, who may or not be maturing at the same rate (Babcock et al. 1972; Osborne 1984; Simmons and Blyth 1987). In addition, peer groups change with a change in school, making social comparisons even more complex (Simmons and Blyth 1987).

Just as with physical maturation, the rate of intellectual maturation varies among students, and even within individual students over time (TFEYA 1989). Adolescents expand their conceptual range from concrete-operational concerns with the here-and-now to hypothetical, future, and spatially remote aspects of abstract thought (Palomares and Ball 1980). While children in this age range have high energy and sometimes short concentration spans, they are also increasingly able to focus attention for long periods on topics that interest them (Epstein 1988).

We have seen that there are substantial variations within the stages of adolescence. There is also considerable evidence that children are entering puberty earlier than in previous generations. In the United States, for example, the average age for the onset of menstruation 150 years ago was 16. It is now 12.5. It is important to note, however, that even though girls and boys become biologically mature at an earlier age, many take longer to reach intellectual and emotional maturity (TFEYA 1989).

Adolescent Identities and Values

Because young adolescents find themselves in what feels like a rift between childhood and adulthood, affiliation and identity become major concerns (Palomares and Ball 1980). Their value systems move from being defined mostly by their parents to being more strongly influenced by their peers. Accordingly, adolescence is characterized by a high need for peer friendships. Adolescents become increasingly dependent on membership in their peer group. They develop more interest in, and closer relationships with members of the opposite sex. They engage in a wide range of activities to help them establish a sense of self and personal identity. In their meta-analysis of research on students in middle schools, Manning and Allen (1987) report that such students, at this stage of their development, are developing their roles and values, exploring their identities, and identifying future aspirations. The following are some key components of the search for identity among young adolescents:

◆ Peer-Group Membership: Group affiliation is one of the central preoccupations of early adolescence. All other issues become secondary to the adolescent's search for belonging and acceptance among same- and opposite-sex age mates (Palomares and Ball 1980; Shultz 1981; Thornburg 1982). Personal and social needs are particularly strong for early adolescents (Thornburg 1982; Lounsbury 1982). Students in this period of their lives need help in building their self-esteem and in increasing their sense of belonging to valued group (Shultz 1981; Babcock et al. 1972; Kearns 1990). They need a sense of social usefulness and guidance in making informed choices, especially about important life decisions (TFEYA 1989; Cheng and Zeigler 1986). Throughout, emerging loyalty to the peer group and the importance of positive self-concept emerge repeatedly as key social development characteristics of adolescents (Calabrese 1987; Ianni 1989; Kenney 1987; Manning and Allen 1987; Thornburg 1982). Establishing social connections with peers strongly influences adolescents' sense of self-esteem and the development of social skills. The process of becoming a member of one or more peer groups presents a number of challenges to adolescents. Along with their strong need to be liked and included, adolescents must clarify in their own minds with whom they wish to identify, and evaluate the social implications of their own personalities (Palomares and Ball 1980). By offering membership, the peer group provides an identity to adolescents, expanding their feelings of self-worth and protecting them from loneliness (Palomares and Ball 1980).

The prevailing North American culture has come to expect adolescents -- even early adolescents -- to begin to flirt and to experience some form of sexual interaction and dating. Increased sexual interest, influenced by hormonal and anatomical changes as well as cultural expectations, becomes a major concern of adolescents. Almost all adolescents experience some form of sex-related activity, and developing meaningful personal standards of morality and behaviour is another critical issue for students during these years (Palomares and Ball 1980). Schools must recognize that the peer group is highly influential for young adolescents and that it can be, at one and the same time, both a major distraction and a powerful ally in the educational process.

◆ Psycho-social Crisis: As adolescents grapple with, and make the psychological adjustment to all of the changes occurring in their lives, they are inevitably going to face conflicts and inconsistencies among the various identities and values available to them. Negative resolutions of these conflicts can leave adolescents with a pervasive sense of alienation: from parents, from peers, and from society in general. Calabrese (1987), in a review of research on adolescence, discusses the physiological and emotional problems of American adolescents as they relate to a sense of alienation (i.e., isolation, meaninglessness, normlessness, and powerlessness) and as they are evident in alcohol and drug abuse, suicide, behavioural problems, and sexual promiscuity. One of the main sources of alienation, according to Calabrese, is the use of adolescents for economic exploitation. They are often treated as a consumer market, a source of inexpensive labour, and as human capital. Materialism has a pervasive influence on adolescent values.

There is also some evidence that adolescents feel a sense of powerlessness especially acutely, given the widely documented need they have for a sense of independence. As long ago as 1953, Noar (quoted in Tye 1985) pointed out that:

> The establishment of an independent personality involves emancipation from parental control and securing equality of status in the adult world. It is this need that lies at the root of so much misunderstanding and conflict in the home and the school. If rebellion against grown-ups could be regarded as evidence of maturity, adults would look upon it with favour.... Teachers who do not fully understand the need for independence are prone to bemoan the seeming loss of respect for their authority.... Instead of encouraging growth in these directions, the school too often makes rules and regulations that deprive the pupils of independence of thought and action.

As Noar indicated, schools can exacerbate the adolescent's feeling of alienation. By providing anonymous structured environments which stress cognitive achievement rather than recognizing emotional and physical needs, middle and secondary schools often promote and reinforce the very sense of powerlessness and isolation to which adolescents in the North American culture are already inclined (Calabrese 1981). In some school-effectiveness studies where students scored high on locus-of-control, indicating that they have control over their destiny and power to determine their lives, the school programs had more positive social and academic outcomes (Reynolds and Sullivan 1987).

- Relationship to Society: Adolescent needs are not just personal or social in the sense of immediate relationships. They are also social in a much wider sense. There is mounting evidence from Britain and the United States that many young people in early and mid-adolescence think and worry a great deal about controversial issues like nuclear war and, more recently, the environment. Many consider it quite likely that there will be a nuclear war in their lifetime. The shadow of nuclear threat has been found to cause misery and anxiety among a fair proportion of young people (Tizard 1984). Issues like nuclear war and the environment may not be the foremost sources of worry among early adolescents, but they are certainly important ones. One of the central needs of early adolescence, therefore, is a capacity to understand and cope with the controversies and complexities of the world around them and develop considered attitudes towards them.

Variations Among Adolescents

While the needs and characteristics we have described are, in a sense, broadly the same for all early adolescents, there are some systematic variations. Gender is a key factor here. In her study of female adolescents, Carol Gilligan (1989) found that girls up to age 11 exhibit well-developed self-confidence and a healthy resistance to perceived injustice. However, after that point, they go through a crisis which erodes the self-confidence of their childhood. The crisis is in their response to adolescence and the structures and demands of the culture which sends girls the message that, as emerging women, they must "keep quiet". By age 15 or 16, Gilligan found, their independence has gone underground. They start not knowing what they had known before. Gilligan asks how parents, teachers, and therapists who work with girls can prevent this crisis and decline in self-confidence during the early years of adolescence.

Gender is not the only source of variation among adolescents. Ianni (1989) and his associates observed and interviewed adolescents in ten U.S. communities over a ten-year period. He found that the norms and behaviours of adolescents and their peer groups were primarily determined by the socio-economic status and the culture of their communities. Indirectly, as well as testifying to the diverse character of adolescence, this study also affirms the importance of parental influences and responsibilities for young people. The National Panel on High School and Adolescent Education (1976) noted that ethnicity and social class were both important variables in determining a student's learning experiences outside the school, expectations of success, and levels of self-esteem.

Summary of the Needs and Characteristics of Adolescents

Adolescence is not created by adolescents. Rather, it is in many respects an adaptation to and reflection of adult problems and concerns, and is partially created by adults distancing themselves from the problems of adolescence by claiming a lack of influence on their norms and values (Ianni 1989).

The need for independence and the need for security are the horns of the adolescent dilemma on which our systems for educating early adolescents have become impaled. The needs of early adolescents are complex, they are critical, and they are challenging for anyone entrusted with the onerous responsibility of meeting them. The challenge of educating early adolescents is most especially one of meeting their personal, social, and developmental needs and of establishing the implications of their educational experiences for them as future adult citizens in our society. This section has identified some of the key characteristics and needs of early adolescence.

They can be summarized as follows. Adolescents need to:

- adjust to profound physical, intellectual, social, and emotional changes;
- develop a positive self-concept;
- experience and grow toward independence;
- develop a sense of identity and of personal and social values;
- experience social acceptance, affiliation, and affection among peers of the same and the opposite sex;
- increase their awareness of, ability to cope with, and capacity to respond constructively to the social and political world around them;
- establish relationships with particular adults within which these processes of growth can take place.

In the remainder of this report, we will explore how well schools currently address these needs and ways in which they might be able to do so more effectively in the future.

CULTURES OF SCHOOLING

Transition as a "Rite de Passage"

Adolescence in general, and the experience of transition to secondary school in particular, can usefully be viewed as a kind of "rite de passage". Measor and Woods (1984), in their longitudinal case study of transition and adaptation to secondary school, describe transition as precisely that. Transition to adulthood and to secondary school is a kind of status passage: one of the most important status passages that people experience in their lifetimes. Whether one is moving from childhood to adulthood in preliterate societies, from single status to being married, from marriage to divorce, or from elementary to secondary school, the movement marks a passage in status from being one kind of person with certain rights and expectations to another.

These status passages are important and they are traumatic. With school transfer, they are sometimes particularly traumatic, argue Measor and Woods (1984), because transfer to secondary school involves not one status passage, but three. It involves:

- the physical and cultural passage of adolescence itself that we call puberty;
- the informal passage within and between peer cultures and friendship groups where different kinds of relationships are experienced and expected;
- the formal passage between two different kinds of institutions, with different regulations, program demands, and teacher expectations.

The multiple-status passage of transition can be a particular source of anxiety, Measor and Woods argue, because the messages and directions of the passage are not at all consistent with each other. Movement from elementary to secondary school and from child to adolescent represents an increase in status. Movement from the top of one institution to the bottom of another and from older child to younger adolescent represents lowered status. For the child, transition can be a good thing or a bad thing. Often it is both -- and this can be confusing and worrying. Reflecting on their discovery of these multiple-status passages and their implications, Measor and Woods (1984) comment that other literature on transition which "concentrate(s) almost exclusively on the formal aspects such as the pupil's academic achievement, miss(es) a great deal and may come to the wrong conclusions".

In chapter 3, we will look closely at the process of transition to secondary school and the ways in which it is and can be managed. Here, we examine what it is students are in transit between -- the culture of the elementary school and of the secondary school -- and the continuities and discontinuities between these cultures.

Two Cultures of Schooling?

The differences between elementary and secondary schooling, and between elementary and secondary teaching, may in many ways be regarded as amounting to differences between two quite distinct cultures of schooling (Hargreaves 1986). To move from one school to another is therefore not just to change institutions but to change communities -- each having its own assumptions about how students learn, how knowledge is organized, what form instruction should take, and so forth. Moving from elementary to secondary education commonly entails moving from a generalist pattern of teaching and programming, where teachers have responsibility for more than one subject, and where, through themes and projects, they can explore the relationships among subjects, to a specialist pattern of teaching and programming, where the curriculum and the teaching staff are divided up by subject specialization (Ginsburg et al. 1977). Elementary-to-secondary transfer entails students leaving behind a relationship with a single class teacher who knows them well, for less extensive relationships with a wide range of subject-specialist teachers (Meyenn and Tickle 1980). In short, as Ahola-Sidaway (1988) has noted in her study of student transfer from elementary to high school in Quebec, transfer entails movement from what, following Tonnies (1887), she calls the world of

Gemeinschaft to the world of Gesellschaft, from a personal and supportive world of community to a more distant and impersonal world of association.

Among teachers, the main differences between elementary and secondary schools are usually felt to be ones of instruction. There is evidence, however, that the differences in instruction between elementary and secondary schools are frequently exaggerated. An Inner London Education Authority survey of teachers found that many had very stereotyped views of the curriculum and teaching methods in the sector other than their own. Many of these views were not based on direct experience or visits (ILEA 1988). Stillman and Maychell (1984) came to similar conclusions in their study of transfer from middle school (age 9-13) to secondary school in two English school districts. Secondary school teachers, they found, held on to "a demeaning stereotype" of middle school teaching which:

> portrays a scene of noisy classrooms with children freely wandering around. What work is done is in small groups and based upon free-ranging topics. The formalities of school learning, the use of reference books, the ability to concentrate, the ability to take notes from the board and to process work is all supposedly absent.

Yet when Stillman and Maychell (1984) compared the teaching strategies in the final year of middle school with the same age group in a parallel system of secondary schools in another school district, they found "no indication of any real differences in classroom practice". They attributed this misunderstanding to lack of experience that teachers have with any sector other than the one in which they are presently working.

The presumption of elementary schools as places awash with active learning and small group work is, in most respects, an erroneous one. Of course, a passing and somewhat superficial visit to almost any open-plan elementary school can give quite a contrary impression -- of movement, of diversity, of students taking initiative and of small group collaboration. It was just these sorts of passing impressions that misled noted American educational writer Charles Silberman (1970 1973), on returning from England in the 1960s, to report the occurrence of what he called a "quiet revolution" in England's primary schools. Closer studies of primary-school teachers' classroom strategies unveiled a very different picture.

In a survey of 468 teachers in Northwest England, Bennett (1976) found that most used a mixture of styles. Only nine per cent of the teachers met the criteria of progressiveness defined in terms of The Plowden Report of 1967 (England and Wales' equivalent to the Hall-Dennis Report in Ontario). In a study of 100 primary schools conducted in the mid-1970s, Galton and his colleagues found a preponderance of didactic teaching and almost no evidence of discovery learning or co-operative groupwork (Galton et al. 1980; Simon 1981). In common with other studies, this research team also found an unexpectedly high emphasis on basic skills among primary teachers (Bassey 1978; Galton et al. 1980; Her Majesty's Inspectorate 1978b). And while they found many instances of students sitting together in groups, they came across very few examples of students working together as groups.

These results are not inconsistent with findings in Ontario. In 1983, the Ontario Ministry undertook a provincial review of education in the Junior Division of 42 schools to determine the range of implementation of *The Formative Years* and *Education in the Primary and Junior Divisions*. They found that only a few schools had high levels of implementation of the policy, philosophy, goals, aims, and specific learning opportunities recommended in those publications (Ontario Ministry of Education 1985).

Although instructional practices, especially those dictated by the rigid scheduling of the secondary school, may vary between panels, it appears that these variations may not be as dramatic as might be predicted. If instruction is not the key factor that distinguishes between the cultures of elementary and secondary schooling, what is? What are transferring students leaving and entering that is so different? A look, in turn, at the culture of elementary school and then of secondary school will give some clues.

For those not familiar with the term "school culture", a few words of clarification may be helpful at this point. The concept of school culture has been defined in many ways, and is still highly contested among writers on the subject. Corbett et al. (1987) define culture as a shared set of norms, values, and beliefs. Wilson (1971) uses an even wider definition to include socially shared and transmitted knowledge of what is and what ought to be, symbolized in acts and in artifacts. Sarason (1971) describes cultures as having norms that possess what he calls "sacred" and "profane" characteristics. Those norms that define professional purpose and are fundamental to teachers' belief systems (e.g., commitment to subject specialty) are considered "sacred" in nature and generally not subject to change. "Profane" norms by contrast, (e.g., student discipline) are acknowledged as the particular way that things are done in the organization and are therefore more susceptible to change. Hargreaves (1990a) adds another dimension to the understanding of school culture. He points out that culture has both content and form. The content of a culture is made up of what its members think, say, and do. The form consists of patterns of relationships between members of the culture -- relationships which may take the form of isolation, competing groups and factions, or broader attachment to a community, for instance. We interpret culture here to mean the content of the shared sets of norms, values, and beliefs of members of an organization and the form of the patterns of relationships among these members. Especially at the secondary school level, we will deal with both the content and form of school culture, as well as with its "sacred" and "profane" qualities.

Elementary School Culture

Elementary school cultures are built upon two central, interlocking principles -- the first, widely acknowledged, the second less so. These are the principles of care and control.

A study in Quebec examined the key differences between elementary and secondary school cultures as they were experienced by a group of students in transition between the two cultures (Ahola-Sidaway 1988). Participant observation was used to gather data regarding 76 students in Grade 6 (elementary school), and the 68 who subsequently entered Grade 7 in English Catholic high schools. Ahola-Sidaway concluded that elementary schools are like families, whereas secondary schools are based on formal contracts. Elementary students are part of the school neighbourhood, have strong connections to the school community, are located in specific classrooms, occupy a designated desk, and have close ties to teachers, classmates, and their principal. Secondary students, on the other hand, go to school outside their community; occupy a large, complex building; have no home-based classroom, desk, or teacher; are controlled by bells, forms, and procedures; and have only a locker as their personal territory. Their connections are not based on relationships with teachers or classmates. Instead, peer cliques are formed around common interests.

Home, family, and community are the symbols of care that characterize the culture of elementary schools. The importance of care for elementary teachers and their students is also revealed in another study which found that student control in elementary schools is more humanistic than in secondary schools, where it is more custodial (Smedley and Willower 1981). In a questionnaire study of the entry-level characteristics of 174 elementary and 178 secondary teachers, Book and Freeman (1986) found that elementary candidates had more experience working with school-aged children and more often expressed child-centred reasons for entering teaching as compared to their secondary counterparts who were more subject-centred in their approach.

In a study of 50 primary schools in London, England (one of the most systematic studies of school effectiveness ever completed), Mortimore and his colleagues (1988) identified positive school climate as one of 12 key factors associated with positive student outcomes. This "positive" climate was a pleasant one with high emphasis on praise and rewards. Classroom management was firm but fair. Enjoyment, happiness, and care were also core features of these positive climates. Mortimore et al. stated that:

> Positive effects resulted where teachers obviously enjoyed teaching their classes, valued the fun factor, and communicated their enthusiasm to the children. The interest in the children as individuals and not just as learners, also fostered progress. Those who devoted more time to non-school chat or small talk increased pupil's progress and development. Outside the classroom, evidence of a positive climate included the organization of lunchtime and after-school clubs for pupils; involvement of pupils in the presentation of assemblies; teachers eating their lunches at the same tables as the children; organization of trips and visits; and the use of the local environment as a learning resource.

Happiness wasn't everything, of course. Focused, intellectually challenging work also mattered, along with a host of other factors. But the presence, persistence, and pervasiveness of care in primary school was clearly associated with the effectiveness of these schools.

In a study of 28 teachers and 12 principals in a dozen Ontario elementary schools, Hargreaves (1990b; also Hargreaves and Wignall 1989) found care to be a central, positive, and often overlooked principle for elementary teachers that often underpinned their active preference for an individualistic approach to their work and for spending most of their time working in their classroom with their own students. So strong was this ethic of care (Gilligan 1982) for these elementary teachers that a number of them expressed serious reservations as to whether they really wanted additional preparation time because this would take them away from their classes and from the children for whom they cared. This sentiment is exemplified in the following quotes from Hargreaves' (1990b) study:

> I wonder if I had much more time away, if I would feel I was losing something with the kids. And yet I could certainly use the time.
>
> There is an amount you can increase it to and then you are missing the kids. This is what I said to (the principal) the other day. It's fine having all these spares, but when do you ever get the kids?

Hargreaves argues that, while the commitment to classroom care of these teachers was admirable, it did not stand alone. Care was clearly bound up with two other arguably less desirable conditions -- ones of ownership and control. Teachers in portable classrooms confessed to becoming overly possessive about their classes -- "you get very mothering...because they're your family and you have this little house." This caused some difficulties in liaison with Special Education resource teachers where disputes could arise about who had "ownership" of the students. Teachers in this study also spoke of the satisfaction of having their own class, of being in control (Hargreaves 1990b; Hargreaves and Wignall 1989).

This complicated interplay of care, control, and ownership in the commitment of elementary teachers may have important implications for students and their movement towards independence as they approach the Transition Years. The nature of teachers' commitment may explain why many students of primary and elementary education have found images of student independence and initiative to be somewhat illusory, with teachers allowing more discretion over when things are studied rather than over what or how things are studied (Pollard 1985; Berlak and Berlak 1981; Hargreaves 1977).

In discussions about transition to secondary school, it is common for secondary schools to be cast in the role of uncaring villains. Certainly, the evidence we have reviewed points to higher commitments to care among elementary teachers than among their secondary counterparts. But this may not be unconditionally good news. For many elementary teachers, care comes packaged with ownership and control, and this may make it difficult for students to develop the independence, autonomy, and security to grow beyond those who care for them most. It may make transfer to secondary school less like a series of increasingly bold and exploratory steps away from home and more like a terrifying leap into space from the nest. One of the best things that elementary teachers might do for their children is, like good parents, to give them the strength and security to grow away from them. This may mean unhinging care a little from its other associations with ownership and control -- with the accompanying sentiments that these are "my children" in "my class".

Some developments in elementary education are helpfully moving in this direction already. At a time when knowledge is becoming more complicated and differentiated and can no longer be coped with by a single generalist teacher, calls for greater subject-specialist expertise in elementary teaching form an important part of the international agenda to improve the quality of teaching in our elementary schools (Hargreaves 1989; Department of Education and Science 1983; Campbell 1985). This is bringing with it not only a wider range of contacts with more specialist teachers for elementary students, especially in subjects like music and art, but also more co-ordinating and consulting between teachers in and out of the classroom. For example, many Ontario school systems now operate with Learning Resource Teachers working co-operatively and collaboratively with classroom teachers to provide appropriate and flexible programs for specific children and groups of children in regular classes. Classroom teachers also work closely with teacher-librarians to offer a "Partners in Action" program to expose children to the much wider source of skills and knowledge provided by the school library. These shared activities are beginning to break down the exclusive sense of ownership that many elementary teachers have been accustomed to having with their classes. If the principle of care can be preserved within these changes, and teachers can work in partnerships to meet these needs for care, then, in the upper elementary years especially, this may provide students with a sounder basis for developing independence to prepare for secondary school. The responsibility for narrowing the gap between the two cultures of schooling is not only the responsibility of secondary teachers, but also of elementary teachers. Change is a challenge for both parties.

Secondary School Culture

When students move to secondary school, what kind of culture are they entering, and how different is that from the culture they have left? Apart from the obvious factors of sheer size and complexity, research and other writing on secondary schools points to three dominant and interrelated factors of their culture: academic orientation, student polarization, and fragmented individualism.

- Academic orientation: Due to its complex nature, understanding high school culture is no small task. Pink (1988) describes the complicated character of high school culture when he portrays the secondary school as a complex organization generating its own norms and operational ethos. He states that conflicting programs not only divide the school but also cast a dubious shadow on goal consensus. Pink notes that high school culture is characterized by departmentalization and isolation. Rossman et al. (1985) also refer to the complex nature of high school and to the difficulty of bringing about change at the secondary level. The literature suggests that a major stumbling block in the path of change at the secondary level is teachers' academic orientation (Boyd and Crowson 1982). This academic orientation of secondary teachers is closely intertwined with their orientation towards subject matter and content -- an orientation which has profound implications for teachers' approaches to instruction, their attitudes to change, and their responsiveness to curriculum integration. We will deal with this issue in detail in our discussion of Curriculum Issues, in chapter 4. Here, we want to note two particular consequences for the wider culture of the secondary school -- for student norms and values, and for the social relationships in which students are involved in school. These consequences are ones of polarization of the student group through ability grouping and of isolation and alienation of students through neglect of their personal and social-development needs.

- Student Polarization: The adoption of a predominantly academic orientation in secondary schools puts a premium on a rather narrow definition of what counts as achievement and success. As we will see in chapter 5, there are many other kinds of achievement, in addition to academic ones, on which secondary schools place considerably less value. Embracing a narrow view of achievement as academic achievement creates large rates of failure by definition (ILEA 1984; Hargreaves 1989). Ontario secondary schools report a trend not unlike that found in the rest of Canada, the United States, and Great Britain. High value is still placed on the academically bright (Lawton and Leithwood 1988).

In the United States, in the past decade alone, at least seven eminent national commissions have published gloomy reports outlining a failure of secondary schools to meet the needs of all of their students (Brown 1984). Goodlad (1984), in an eight-year study of the status of the public education system in the United States, described it as being in a state "nearing collapse". Schools become increasingly stratified as they are called upon to train students in accordance with their mental abilities and specific skills (Cremin 1961). The majority are trained to fill the requirements of a hungry marketplace while a few attend universities and colleges (Greene 1985). Adler (1982) bemoaned the existence of what continues to be a class society in schools and the manner in which students are placed into streams that exude inequality.

Streaming has a close relationship to the academic orientation of secondary schools. The first point to note is that if, as we shall argue in chapter 4, the proper purpose of education in the Transition Years is to provide a broad and balanced education for all students and to recognize a wide range of achievements, then a uniform policy of streaming is inconsistent with such goals. To say that different forms of achievement are equally worthwhile, then to group students according to only one dimension of achievement, is inconsistent. The existence of separate, insulated tracks -- advanced, general, and basic -- is an example of such inconsistency in the context of a commitment to broad educational goals.

Allocation of students to streams is supposed to be based fairly on merit and ability, as indicated by standardized test scores. In practice, though, counsellors and teachers often also include behavioural and attitudinal criteria in assigning students to streams -- judgements about behaviour, motivation, effort, amenability, and so on (Cicourel and Kitsuse 1963). This may be one reason for the research finding that poor and ethnic minority students are disproportionately represented in lower streams (Persell 1977; Hout and Garnier 1979).

A common argument in favour of streaming is that students feel more positively about themselves and achieve better when they are with other students they perceive as similar to them. Research evidence does not support this claim. Placing students in average and low tracks appears to lower their self-esteem, not raise it (Esposito 1973). One response to these findings might be that the lowered self-esteem of low-stream students may be due not to their stream placement, but to factors located in the students' home backgrounds. However, some of the research indicating lower aspirations among low-stream students has found this result even when home background factors have been held constant (Alexander, Cook, and McDill 1978).

Students in lower streams receive poorer instruction from less qualified teachers (Murphy and Hallinger 1989). Lawton, Leithwood et al. (1988) found greater emphasis being placed on discipline and control in the general and basic level programs as compared to the advanced level program where quality of instruction was accentuated. In general, students in general and basic level programs form subcultures that are not as valued. The good student is one who has acquired good academic and social skills, as well as having a positive and co-operative disposition (Lawton and Leithwood 1988). Students who do not meet these criteria are prone to drop out of the school picture.

In general, lower stream students spend less time learning, are taught lower level skills and are exposed to a narrower range of instructional materials (Trimble and Sinclair 1987; Murphy and Hallinger 1989). In short, they receive less opportunity to learn (Earl et al. 1989).

Experiences such as these help create what David Hargreaves (1982) calls a "loss of dignity" that is unintentionally inflicted by the secondary school system on its students. Not surprisingly, students in lower streams feel less connected to their school than their higher stream counterparts (Goodlad 1984; Oakes 1985; Murphy and Hallinger 1989). In many cases, lower stream students may go further and protest their loss of dignity by forming countercultures of opposition -- inverting the school's values and making these inverted values their own -- to provide a source of status and identity for their low-stream group (Willis 1977). In a study of secondary school boys, David Hargreaves (1967) found these inverted values embraced fighting, swearing, untidy dress, sexual promiscuity, and general anti-school attitudes. Pressure to conform to the norms of the stream peer culture are strong. In Ontario high schools, if students do not belong, they risk being perceived as "losers" (Lawton, Leithwood, et al. 1988).

It is common to imagine that the attitudes, behaviour, and work habits found in low streams are a reflection not of streaming itself but of the social backgrounds, the home, and the community environments from which low-stream students come. One of the most interesting challenges to this view is Lacey's (1970) classic study of an English grammar school. What is interesting about Lacey's study is that it focused on students selected for grammar school (the top 10%-20% of the ability range) who on entry to that particular kind of high school, all saw themselves as "best pupils" within their previous primary schools. The students were streamed soon after entry at age 11 and, at first, this produced a wide range of responses of individual anxiety among many lower stream students, as they tried to accommodate to the new classification that streaming had placed upon them. After a year or so, these individual responses began to cohere into a definite, shared culture, with strong anti-school elements, which rejected academic values, gave high status to misbehaviour, and so on. Lacey's explanation was that, once a school differentiates students into separate groups by some valued criteria, this leads to polarization between the groups, with the more successful groups embracing the official values of the school, and the less successful ones inverting them. Streaming is therefore a system of differentiation that creates student polarization and leads, in lower streams, to a higher incidence of truancy, delinquency, and dropout (Shafer and Olexa 1971). The contribution of streaming to student polarization has been replicated in other studies (D. Hargreaves 1967; Ball 1980).

Streaming is a product of the overwhelming academic orientation that characterizes the culture of secondary schools. This culture values academic achievement above all else and ranks students in relation to it. Students who are out of tune with this very particular value system respond to the differentiation by polarizing themselves in relation to the school's values and the successful students who identify with them. Counter-cultures form, gangs are created, and the school becomes divided into very different student subgroups, often at odds with each other. There is not one secondary school culture here but many, and the school's capacity to have students learn and work together as a single community is undermined.

The Radwanski Report (1987) recommended that the practice of homogeneous-ability grouping for instruction in any subject be discontinued for all schools in Ontario.

Radwanski denounced the current practice of streaming high school students into -advanced-, general-, and basic-level courses.

In the First Report of the Provincial Government's Select Committee on Education in Ontario (1988), a number of recommendations on streaming were presented to the Legislature. One recommendation called for the replacement of formal homogeneous grouping at the elementary level with approaches such as mentoring and flexible group instruction in heterogeneous classes. It also recommended the offering of unstreamed courses, at least until the end of Grade 9.

The Speech from the Throne of April 1989 announced a core curriculum in Grades 7 to 9, emphasizing the development of basic skills and the elimination of streaming in Grade 9. This represented a dramatic shift from the OSIS report (1984), which specified that courses from Grades 9 to 12 be offered at one or more levels of difficulty -- basic, general, or advanced.

These policy declarations offer the possibility of alleviating the polarization among student groups that characterizes many streamed secondary schools, and of building secondary schools as more cohesive communities of shared goals and objectives, not just among staff but also among students. Unfortunately, politically prescribed elimination of streaming does not ensure that these problems will be resolved. It merely supplies the opportunity. More than this, on the basis of existing research we want to warn readers of the dangers of replacing one problematic secondary school culture (a polarized one) with one that is equally problematic (a fragmented, individualized one). This is a theme to which we turn next.

- Fragmented Individualism: Although much educational research is critical of many of the consequences of streaming, it has to be acknowledged that, in terms of academic achievement, research findings on the respective merits of streamed and unstreamed systems have been inconclusive (Reid et al. 1978; Brophy and Good 1974; Findly and Bryan 1975; Kulik and Kulik 1982,1987; Peterson 1988).

On reflection, this is not surprising, as an important study by Ball (1980) points out. For, while it is common for schools and teachers to agree on the principle of mixed-ability grouping, agreement is less common about mixed-ability teaching; about how classes should be taught. This explains two important findings in comparisons between mixed-ability and streamed classes. First, in a comparison of streamed and unstreamed primary school classes, student achievement was more closely related to the teacher's attitude towards streaming than it was to the existence or non-existence of streaming itself. Teachers in unstreamed classes often continued to teach them as if they were still streamed (Barker-Lunn 1970). Second, in his study of the introduction of mixed-ability grouping, Ball (1980) found that, having avoided discussion of how the new mixed-ability classes should be taught, teachers continued to use the same teaching methods commonly used for their subjects. French Language teachers continued to teach "from the front", aiming their teaching "at the middle" of the group. Mathematics teachers continued to use individual worksheets and textbooks, but spread them over a wider range. With the exception of English, there was little evidence of teachers allowing different activities in the class to take place simultaneously, or of their reconstituting groups from one lesson to the next for different teaching purposes.

These findings serve as a reminder that the central issue in destreaming is not so much how students are grouped, but how they are taught. Heterogeneous grouping creates a possibility. It does not, of itself, solve any problems. Ball's research alerts us to a danger that may occur with destreaming if instruction is not directly addressed by the school as a whole community. If it is left to individual-teacher discretion, or even to the discretion of departments, it is possible that many teachers may resolve what they see as a "problem" of heterogeneous grouping by using systems of worksheets through which students proceed at their own rate, according to their own abilities. Such a system may resolve some problems of classroom management, but it also may lead to students becoming isolated, separated from their teachers, and segregated from their peers, as they work alone in their own little space with their own private sheets. If that were to happen, it would reinforce a worrying cultural trend in secondary school culture about which a number of writers have already expressed considerable concern -- the culture of individualism.

David Hargreaves (1982) argued that secondary schools are deeply imbued with a culture of individualism. Similar to practices in Canada and the United States, teachers in Great Britain own the classrooms, and pupils move around the school like frantic passengers in an overcrowded airport. He calls this phenomenon the loss of corporate territory. The lack of a sense of corporate home or collective responsibility leads to a weak sense of institutional pride (also Rutter et al. 1979). High dropout rates in secondary school reflect dissatisfaction among students caused by the failure of the educational system to meet their needs (Wehlage and Rutter 1986). Classes organized around control and competition are considered boring (Fine 1986). David Hargreaves (1982) describes secondary schooling as a "curiously fragmented experience" for students; of school bells sounding every 40 minutes or so to signal a changing of the guard. Isolation is still the norm for secondary school students' experience (Firestone and Rosenblum 1987). And the world in which they are isolated can be a large, complex, and intimidating one. This is particularly disturbing for students in the Transition Years, whose needs for care, security, and corporate attachment, we have seen, are exceptionally strong at this stage of their development. As Lawton, Leithwood, et al., (1988) noted:

> Adolescent society is formless, yet fixed -- a simple pecking order, and yet as complex as any other social organization in which it is incumbent upon each to make one's presence felt...to be special in some way...to count. Students unequipped emotionally to handle the taunts, jibes, and jeers that are as much a part of high school life as books and examinations, may seek more welcoming locations outside of school within which to grow up.

Self-image is important in the personal development of the adolescent. Adolescence is a time for establishing and testing perceptions of self as worthwhile individuals (Carter 1984; Seltzer 1982). Interaction of teachers and peers with the adolescent individual are essential elements in the formation of self-perception. Yet, Karp (1988) observed that student dropouts in Ontario generally suffered a lack of self-esteem and were frustrated in a school system they felt cared little about them. More caring teachers and interesting courses were designated as two key ingredients that would have kept them in school. The culture of individualism is a source of concern for students' experience of school, their satisfaction with it, and their willingness to stay on. It is also a concern in the longer run, in terms of the kinds of adults these isolated, individualistic students will become. Will they make up a future "me generation" -- individualistic, materialistic, and self-seeking? Immersing students in the heterogeneous classroom in a world of worksheets will increase these possibilities.

A major study by the University of California reported that first-year university students are more materialistic and less altruistic than they used to be (Association of Universities and Colleges of Canada 1982). While the literature suggests that the high school graduation certificate is no longer perceived as a guarantee of material success, the full- and part-time job is seen as a way of realizing materialistic goals. Etzioni (1982) claims that materialistic pursuit is related to the "ego-centred mentality" that is "rooted in American individualism". The current culture of secondary schooling may in many respects reinforce the individualism of the wider culture, unintentionally instilling its students with the very values which will lure them early to the workplace, rather than ones that will secure their attachment to the school and the community of learning that it represents.

The "me generation" applies to teachers, students, and parents alike. The quest for self-fulfilment has, in many respects, been subsumed in a sea of individualism and isolation. Teachers become isolated from their students and the public through the guise of expertise and specialization. Many secondary school students experience inequality in a meritocratically inclined system that is seen to favour academically bright students. They experience this alone in the culture of individualism, or within the refuge of a student counterculture. What they experience little of is care, concern, or community. With their dignity damaged and their attachment severed, it is little wonder that such students opt for the more immediate attractions of the labour force and its remuneration.

Secondary school culture has thus become as much of an enigma as adolescent society itself. It is complex, unpredictable, and skewed toward a very particular set of academic values. It is not as if secondary teachers do not really care for their students, but the existing structures of secondary schooling, that are deeply embedded in a traditional academic orientation, make it difficult for them to show that caring. Most secondary teachers see too many students, too infrequently, and too briefly. This is a system developed less for the care of the student than for coverage of the subject. It is not so much the teachers that are at fault here, as the structures, the sacred norms of secondary schooling.

Ultimately, solutions to these fundamental problems, these failures to meet the personal, social, and developmental needs of adolescence are to be found in curriculum and instruction; in what secondary schools teach and how they teach it. We will return to these matters in chapter 4 . But, in addition, there is a range of other measures that secondary schools can adopt to provide more care, more adult support, and a greater sense of corporate belonging and responsibility for their students. These measures include strengthening the role of homeroom teacher, appointing mentors or student advisers for all students, forming smaller teaching teams, and so forth. These measures are discussed in detail in our next chapter, in which we discuss research and other literature on the transition process and on helping the student adjust to secondary school.

TRANSITION AND CONTINUITY

Transferring from elementary to secondary school involves making a transition between two cultures of schooling. In this transfer, there are continuities and discontinuities, some of them planned, some of them unplanned (Derricott 1985). Four aspects of transition are therefore theoretically possible in the transition between the two cultures (summarized in figure 1).

Figure 1

Planning	Presence/Absence of Continuity	
	Continuity	Discontinuity
Planned	Planned Continuity	Planned Discontinuity
Unplanned	Unplanned Continuity	Unplanned Discontinuity

Unplanned discontinuity is perhaps the main focal point for research and writing on student transition. The differences between elementary and secondary school are described here as being too sharp. The size of the leap made at transfer may be too great, perhaps explaining why short-term student anxiety commonly follows transfer (Nisbet and Entwistle 1966; Youngman and Lunzer 1977; Galton and Delamont 1980). Much of the criticism regarding transfer and transition has been levelled at secondary schools. Their curriculum, ethos, and orientation have been criticized for being overly directed towards the academic needs of their older, university-bound students, creating a curriculum which is too fragmented and insufficiently interesting and motivating for younger and less able students (D. Hargreaves 1982; Goodlad 1984). The size and bureaucratic complexity of secondary schools have been held responsible for leaving students with no sense of home or place, no attachment to their school as a community (D. Hargreaves 1982; Radwanski 1987).

Criticism for excessive degrees of unplanned discontinuity have not been placed entirely at the doors of secondary schools, though. Many of the recent debates about extending preparation time for elementary school teachers in Ontario, have involved arguments about the need for students to be taught by a wider range of subject-specialist teachers in the elementary years than is presently the case (Hargreaves and Wignall 1989). It seems that the care which elementary teachers admirably show for their students sometimes gets a little too tied up with how such teachers also value their ownership and control of "their own" classes, "their own" kids. Care of one's own class can sometimes become too precious and perhaps get in the way of students' needs for developing independence. There are clearly issues for elementary schools to address here, too -- particularly with regard to teachers working together more closely as colleagues learning to share some of the care for their students that they might otherwise have wished to keep to themselves.

Unplanned discontinuity may not be the only source of problems for transition; unplanned continuity may also pose difficulties. In some things, continuity may not be wanted. Elementary schooling is not always as geared to active-learning or child-centred education as it is imagined to be, and instructional strategies heavily focused on the separate teaching of basic skills and drills may be more prevalent than is often thought (Goodlad 1984). In this respect, elementary schools or junior high schools, it has been found, can sometimes be almost more like secondary schools than secondary schools themselves (Tye 1985; Delamont and Galton 1980).

One final problem area for transition of which administrators need to be just a little watchful is where the process of transition and continuity is overplanned. This is a point that Measor and Woods (1984) make on the basis of their study of how transition is managed through the student culture. The student culture, they point out, is a powerful point of reference for adolescents. Its myths and its messages cannot be eradicated, nor perhaps should they be. The messages of the student culture, can, however, be supplemented by improved official information, by more informal contact between the sectors, and by planned involvement of students in various aspects of the transition process as well.

The key issues for educational policy and change would therefore seem to be as follows:

- planned continuity -- the most commonly understood area in which reform is recognized as being needed;

- planned discontinuity -- situations where a sharp and substantial change in status is deliberately created, for which students are actively prepared;

- unplanned aspects of transition -- aspects of transition which schools choose not to "manage" and which they feel are best left to the informal network and processes of the student culture.

These are the subjects of our next chapter, in which we review and discuss research on the transition process itself.

PROBLEMS OF TRANSITION

In the last chapter, we pointed out that transition to secondary school is a kind of status passage. It is an important passage in a young person's life. The passage offers the promise of elevated status, more independence, more interesting experiences and opportunities. It also poses problems of lost security, threatening encounters, and unknown expectations. The passage of transition is a passage of mixed messages, of contradictory possibilities. Only one thing is certain about the passage of transition to secondary school -- it is a passage that cannot be avoided. Well prepared or not, all students must undertake it.

Research concerned with the transition from primary to secondary school varies in terms of the part of the transition period that is studied. Most studies seem to accept the transition period as extending from the last year of elementary or primary school (the pre-transition period), through the first month or weeks of secondary school (the immediate transition period), and extending to the latter part of the first year of secondary school (the post-transition period). Major studies, such as those by Power and Cotterell (1981), Evans (1983), and Measor and Woods (1984), follow students from their last elementary school year to the end of their first secondary school year. A few studies are concerned only with the expectations of students in the last year of primary school or with the perceptions of students on starting high school. Such studies miss important information about changes during the first year of secondary school.

There are three areas in which transition to secondary school can result in potential problems:

- student anxiety about transfer and the extent to which that anxiety persists;

- adjustment to secondary school and the short- and long-term implications of transition for achievement, motivation, and commitment to school;

- continuity or discontinuity in the curriculum and the implications of gaps or repetition in the curriculum for student learning.

Anxiety

Student anxiety is the most obvious and commonly cited area of concern in the transition to secondary school. There is some evidence that, in their final year of elementary school, many students do indeed feel anxious or apprehensive about some aspects of high school. Garton (1987), using a questionnaire incorporating five scales, suggested that this anxiety reflected concern about relations with older students, harder work, bigger buildings, and different sorts of teachers. Mertin, Haebich, and Lokan (1989), in a study based on analysis of students' drawings of what they thought high school would be like, found a preponderance of negative features in the drawings relating to vulnerability, aggression involving older students, and negative views of academic work.

In Ontario, the York Region Board of Education surveyed students regarding their concerns about transition at the end of Grade 8 and again at the end of their first term in Grade 9 (Bulson 1984). The major concerns of the Grade 8 students were finding their way around the new school, their ability to handle longer exams, uncertainty about the consequences of incomplete homework or missed classes, anticipated confusion with class rotation, and gaining entry to extracurriculuar programs. Once in Grade 9, the students still expressed concern about their ability to handle longer exams and uncertainty over consequences of incomplete homework and gaining entry to extracurriculuar programs (though a smaller proportion raised this concern than had in Grade 8). The Grade 9 students also expressed additional concern about their ability to understand teachers (which was more prevalent among advanced- and general-level students than basic-level students).

Studies in England confirm that student anxiety commonly focuses on a mixture of concerns about the unfamiliarity and difficulty of work; the size of the school and the chances of getting lost in it; homework and bullying (Neal 1975; Norfolk Middle-school Headteachers 1983).

Measor and Woods (1984), in their longitudinal case study of student transition to secondary school, found similar anxieties about relationships with older students, the size of the school, the difficulty of the work, the strictness of the discipline, and the impersonal nature of the teachers. Their intensive case-study approach also identified an important dimension of transfer-anxiety that other studies, based on interviews and questionnaires, have tended to miss. This is a dimension of transfer-anxiety that at first glance looks rather trivial, but is, they say, exceptionally important. This dimension, they call "pupil myths".

In Measor and Woods' (1984) observations, students create stylized and exaggerated stories and warnings, regaled in graphic detail, of the dissection of live rats, of unspeakable organisms preserved in formaldehyde, of all new students having their heads flushed down the toilet on their birthday, and so on. Most of these stories, told over and over again in the same way by many different students, are factually false. Yet no amount of rational persuasion or assurance by teachers during induction programs and the like will totally convince students that they are without foundation (Freund 1985). Their occurrence and persistence in many different countries around the world testifies to their resilience.

These stories persist, say Measor and Woods, because they serve powerful symbolic functions which touch on students' emotions and reach down to their unconscious. Effectively, they warn students about the upcoming inversions in their status (heads down the toilet), about the areas of the school that are controlled by older students and that are to be avoided or treated with caution (the washrooms), and about the generally "tougher" environment and expectations that secondary school will present. What is revealing about the mythical status of these stories, say Measor and Woods, is that, by the end of that first year in secondary school, the transferring students become tellers of the very tales to which they were once subjected. Clearly, the story is more important than the storyteller and provides a way of conveying, through the student culture, signs and warnings about the change to come, the status passage ahead.

Teachers often treat these myths as part of the problem -- as an unnecessary source of anxiety for students that should be rationalized and explained away. Measor and Woods suggest that the myths might, in fact, be part of the solution in that they provide a way of passing on warnings through the culture that is increasingly important to early-adolescent students -- that of their peers.

Secondary school is not always an unremittingly frightening prospect for students. In many respects, students also look forward to secondary school, particularly to taking new subjects. Trebilco, Atkinson, and Atkinson (1977) suggested, on the basis of interviews with students and parents, that the transition to secondary school was viewed with positive anticipation. Similar findings of a lack of anxiety among primary students were reported by Ford (1985).

In part, these differing results reflect the fact that transition is a process that evokes generally mixed feelings among students. But there are also sources of variation between schools and between types of students in the degree of anxiety that is generated. At the school level, Garton (1987) found that students' attitudes and expectations reflected the degree of contact with the high school and the existence of an induction program involving visits to the secondary school (also Breen 1983). Galton and Willcocks (1983), found that, in elementary schools which exaggerated (unintentionally) the traditional nature of the secondary school to which students would be transferring (by using warnings like "you won't get away with work like this there"), students' anxiety was higher before transfer than it was for students from other feeder schools, but lower afterwards, once the high school teachers were found to be less threatening than had been imagined. In a sense, these "teacher myths" about what high school may really be like, may be functioning like the "pupil myths" described by Measor and Woods. This is not to advocate the use of "teacher myths" in the transition process; simply to point out that, once we acknowledge their existence, "pupil myths" do not seem quite so immature by comparison. Both serve to transmit important warnings in a context of high emotion and low information.

The amount of experienced anxiety about transfer also differs between types of student. In Australia, Breen (1983) and Richards (1980), both found that information provided by primary teachers can usually predict quite well those students who may have trouble moving to secondary school. Who are the particularly at-risk groups?

- Anxieties are usually greater for boys than for girls (Garton 1987; Mertin, Haebich, and Lokan 1989). Boys are more likely than girls to be involved in school problem behaviour, both as perpetrator and as victim (Simmons and Blyth 1987);

- Anxieties vary between different pupil "types", but these patterns of variation are quite complex in character, showing no clear distinction by ability, for instance (Youngman and Lunzer 1977). As we shall see shortly, the most important between-student differences in attitude to transfer are not ones of short-term anxiety, but of longer term adjustment.

Anxiety about secondary transfer is indeed short-term. Power and Cotterell (1981) followed students from early in their last primary school year through to the end of their first secondary school year. At first there were anxieties (more for boys than girls) but these did not persist for long. Overall, students found high school to be better than they expected: more interesting and less difficult, and classrooms were less structured and less involving than what they had experienced at primary school. Other studies have also suggested that anxieties about the social and organizational aspects of secondary school disappear after a short time (Breen 1985; Knight 1984; Mertin et al. 1989; Trebilco, Atkinson, and Atkinson 1977).

Galton and Willcocks (1983) studied students undergoing transfer from six schools and administered a questionnaire dealing with childrens' anxiety twice during the transfer year. In the main, the pattern of anxiety about change was one of high anxiety just before transfer, followed by a decline in November and again the following June (also Nisbet and Entwistle 1969; Youngman and Lunzer 1977). However, when students were transferring from schools with a more characteristically "primary" atmosphere, anxiety levels were the same after one year in secondary school as they had been on entry. The differences here had perhaps been understressed and the importance of the change played down.

Whatever the source of anxiety and however traumatic it can be at the time, these anxieties are nevertheless short-lived. There are also positive aspects to transfer, such as the great expectations that students have of their new school, sometimes heightened still further by well-orchestrated induction programs. But at the heart of their promise may be the greatest danger of all -- of expectations being unfulfilled and disenchantment setting in. These dangers alert us to the longer-term implications of transfer which we examine next.

Adaptation

Perhaps the most important implications of Galton and Willcocks' thorough study of student transfer is not what it reveals about short-term student anxiety, but what it shows concerning longer term adjustment to secondary school. Galton and Willcocks (1983) produced some important findings on students' achievement and motivation as they adjusted to secondary school.

- Although almost all children in the sample made good progress in tests of basic skills in the last two years of primary school, only 63% made gains on the same tests one year after transfer, and these were smaller than in previous years.

- Almost a third did worse on their tests at the end of the first year at secondary school than they did in their last year of primary school.

- Students experienced a decline in achievement in their first year of secondary school, lost motivation, and enjoyed school less.

- In the whole-class teaching environment of the secondary school, many students became "easy riders", doing just enough to avoid the teacher's attention.

These disturbing declines in student progress were also reported as evidence to an influential committee reviewing the quality of secondary education for the Inner London Education Authority in England (ILEA 1984). In Australia, Power and Cotterell (1981) also found a decline in student satisfaction over the first year of secondary school (also Breen 1983; Evans 1983; Richards 1980). This longer term decline in satisfaction with school is generally regarded as a more important and intractable problem than the anxiety associated with the first contact in the new school.

Some groups are more at risk than others in the longer term process of progress in, and adjustment to secondary school. They have been identified in innumerable reports and studies related to dropping out of school (e.g., Karp 1988; King et al. 1988; Radwanski 1987.)

Some groups who may be particularly "at-risk" in the longer term sense are:

- students from backgrounds of lower socio-economic status (SES) (Nisbet and Entwistle 1966; Spelman 1979)

- students (and these are often also students from lower SES backgrounds) who have to endure long bus journeys to their new schools, especially in remote communities (Gorwood 1986; Friedlander 1986; Ryan 1976)

- students from a range of ethno-racial groups. A study of dropouts in Boston middle schools found that practices of attendance, suspension, and retention (requiring students to repeat grades) increased student disengagement from school and encouraged at-risk students to drop out. The study found that Black and Hispanic students had higher rates of absenteeism, retention, and suspension than the general school population (Wheelock 1986).

- lower achieving boys. King et al. (1988) found that the majority of school-leavers in their Ontario study were boys and that they were far behind their peers in accumulating the necessary credits for graduation. A study of Grade 9 students at risk in London, Ontario schools found boys more frequently at risk than girls. Many had not been identified as at-risk in Grade 8 and only 23% received guidance services in Grade 9. The major source of their problems was taking courses that were too difficult (Stennett and Isaacs 1979). In Galton and Willcocks' (1983) study, the rates of achievement of boys and girls were virtually the same before transfer, but one year later, 45% of the boys had fallen below their primary school score, while only 15% of girls had done so.

- less athletic boys (ILEA 1988)

- girls who are at risk of relinquishing the strength of confidence and self-concept they once had in elementary school. Simmons and Blyth (1987) found that girls during transition scored less favourably than boys in self-image. Girls continued to place a higher value on same-sex popularity than did boys. Girls' greater tendency to place a high value on body image and same-sex popularity also made them more vulnerable in the transition to a new school as the peer group by which they judged themselves was disrupted.

The Inner London Education Authority report argues for more effort spent identifying students with difficulties prior to transfer (particularly with regard to reading level) and greater concentration of resources on at-risk students prior to transfer. In this regard, it suggests that the final year of primary school may be more crucial than previously recognized (ILEA 1988). King et al. (1988) suggest that schools should concentrate on such things as reversing previous patterns of academic failure, building student confidence, improving guidance services, providing alternative programs, establishing firm attendance policies, reducing course failure rates, and creating a positive school atmosphere that encourages students to feel a sense of belonging to the school. Particular measures of this kind are exceptionally important, but enormous efforts on the part of national, provincial, and school board initiatives have not proven to be very successful at reducing the dropout rate. This poses questions not just about the needs of particular students, but about the overall structure of secondary education itself, and how appropriately and effectively it is meeting the needs of its young clients. Some of the issues requiring attention reach right down to fundamental, "sacred" aspects of secondary schools -- to issues of program, for instance. We will touch on some aspects of those program issues next, particularly issues of curriculum continuity, but we will address the whole structure and orientation of the secondary school curriculum in more detail, in the next chapter.

Curriculum Continuity

Power and Cotterell (1981) found that the biggest declines in student satisfaction in the first year of secondary school concerned "usefulness-relevance" and "clarity-difficulty" of school work. Moreover, they reported differences in the way attitudes to particular subjects changed. Where there was continuity in the curriculum there was little change (e.g., science); where the curriculum and teaching changed to become more expansive, there was an improvement (e.g., English); and where there was inconsistency, there was a deterioration (e.g., mathematics, social science). It appears that the extent of discontinuity varies between different regions and districts. In general, however, there are disjunctions in many subject areas (Cunningham 1986; Kefford 1981; Knight 1984; Pike 1983; Powell 1982).

Continuity in curriculum is important for students in the Transition Years. Many writers argue the importance of curriculum constituting an uninterrupted, ordered sequence in the educational experience of young people (e.g., Gorwood 1986; Derricott and Richards 1980). Some teachers, however, are opposed to relying too heavily on what students have done before, lest they be handicapped by prematurely applied labels. Students, these teachers feel, should be allowed to begin secondary school with a "fresh start", a "clean sheet" (ILEA 1984).

Stillman and Maychell (1984) point out that this "clean sheet" philosophy is not a tenable one, at least in curriculum terms. While there might be a case for change in curriculum being sharp rather than smooth, this, they say, should be planned, in full knowledge of what has gone before, rather than left to chance and circumstance. The decision either to start afresh or to go over the groundwork, they note, arises not from careful planning but from lack of communication. Unplanned repetition of content in some cases and substantial gaps in learning in others, are the unfortunate consequences of elementary and secondary schools not joining together to plan curriculum across the transfer divide.

Gorwood (1986) found that the unwillingness of teachers to consult on curriculum continuity is a product more of reticence than of apathy. Whatever the reasons, the overall outcome is of poor or inconsistent attention to curriculum continuity across the elementary-secondary divide. Where this matter is given attention, it tends to be in certain subjects only (mainly the high-status academic areas, such as mathematics, English, French, and science) but not, for instance, in art, humanities, music, or health education (Stillman and Maychell 1984). Moreover, in their observation of meetings set up to establish curriculum continuity in particular subject areas, Stillman and Maychell noted a tendency to rush prematurely into specific decisions about content, rather than discussing the "deep structure" of the subject and the essential skills, concepts, attitudes, and knowledge that elementary and secondary teachers should attend to at different stages.

From these research findings drawn primarily from Britain and Australia, where district curriculum guidelines have traditionally tended to be defined less closely than in North America (at least until very recently), the problem of curriculum continuity has come to be recognized as an important one and initial steps have been taken to respond constructively to that problem. Implementation remains uneven, though, and tends to be concentrated in some subjects more than others. The reticence that many teachers in the two sectors have about consulting each other on curriculum matters still needs to be overcome.

Summary -- Transition Problems

Short-term problems of student anxiety, longer term problems of declining achievement and motivation among students, and persistent problems of curriculum continuity are the key problems of the transition process. Schools and school systems, in Ontario and beyond, are by no means oblivious to these difficulties and many have made positive efforts to improve and adjust their practice in order to respond more effectively to transition issues. In the remainder of the chapter, we will review some of the specific measures that have already been taken, and others that have been proposed in this important area of school reform.

RESPONSES TO TRANSITION

Reform efforts designed to improve the experience and consequences of transition appear to fall into six broad areas -- efforts, that is, that fall short of an entire reorganization of the curriculum and assessment structures of secondary schooling. These deeper, more fundamental issues are the subject of the next two chapters. We will review the more specific areas of reform here. They are:

- choice of secondary school
- planning, communication, and joint work between secondary school and elementary school teachers
- recordkeeping systems and practices

- induction programs and procedures
- institutional reorganization, especially in the form of middle schools
- organizational changes in secondary school.

Choice of Secondary School

Some of the issues involved in transition from elementary to secondary school are complicated by questions involving the choice of school. In Gorwood's (1986) study of transition in one school district in England, the average number of feeder schools from which secondary schools drew their students was 18, with a range of between seven and 28. In the large Metropolitan area that made up the Inner London Education Authority in England, students in one secondary school could come from as many as 30 or 40 primary schools (ILEA 1984). In Ontario, there is an average of about five feeder elementary schools for every secondary school but, in many urban areas, students may attend any secondary school of their choice. In rural areas, they may have to travel long distances to the only accessible secondary school (Ministry of Education 1987). That students can transfer between separate school and public school systems, as well as into and out of specialized programs like French immersion only adds to the complexities.

For those principals and teachers seriously committed to building constructive liaison between elementary schools and the secondary school into which they feed, this complexity can be quite dispiriting. Yet the complexity does not affect all areas alike. Outside metropolitan areas, the choices are much reduced, particularly in small towns and rural communities, and the theoretical possibilities for liaison (notwithstanding problems of distance) are much improved. Even where choices are more dispersed and the number of schools involved in having their students move to any one secondary school is high, possibilities for focused liaison still exist. In practice, most of a secondary school's students come from only a small number of feeder elementary schools, with a small number of students coming from other schools. Focusing liaison and continuity efforts on what is seen to be a coherent family of feeder schools therefore helps meet the needs of most transferring students. Moreover, once active liaison is set in motion, the process becomes self-fulfilling, as the elementary schools build up an image and identity of being a particular secondary school's "natural" feeders (Freund 1985).

Choice and continuity do not sit well with each other. But the obstacles their coexistence present are not insurmountable and coherent liaison procedures can be established in a way that will address the needs of most of a school's entering students. In smaller towns and rural areas, as schools are geographically clustered into more natural "pyramids", arranging this liaison should be more straightforward, although distance and time present their own unique difficulties.

Planning, Communication, and Joint Work

One way to remedy many of the problems, particularly the unplanned repetitions and discontinuities, of transfer is to increase the amount of direct teacher contact between the two school levels (ILEA 1988). Ontario education policy provides for consultation between staff of schools from which students come and those to which they proceed to ensure continuous progress of individual students (OSIS 1989). Elementary-secondary contacts can take four broad forms:

- exchange of information, especially in the form of student records (which we shall discuss separately)

- meetings between teachers at the two levels
- shared experience and joint work between teachers in the two sectors
- teacher training at pre-service and in-service levels which familiarizes teachers with the issues that concern both elementary and secondary educators.

◆ Meetings are one way of achieving understanding and continuity between elementary and secondary systems. From their participant observation of curriculum and liaison meetings, Stillman and Maychell (1984) found that the following factors contributed to greater effectiveness in these meetings:

- involvement, at some point, of staff from the school board, to lend the meetings authority and direction
- presence, at some stage, of the participating headteachers (principals). Without the visible involvement of the school leaders, teachers often do not feel sufficiently empowered to make important decisions themselves.
- a balance of primary (elementary) and secondary school staff so that no one group dominates the decision-making process
- involvement of subject teachers and not merely "guidance" or "administrative" staff, in discussions that will and should inevitably bear on their own teaching
- a rotating "circus" of venues to meet, moving from one participating school to another. This is not merely a shrewd act of diplomacy. It also increases familiarity and understanding among the participants of each other's schools.
- privacy, to generate open discussion. Gathering in the corner of a hectic staffroom does not create the best atmosphere.

- time, especially scheduled time in the school day. This is more likely to secure commitment, to make the job manageable, and to signal the seriousness of the task.
- if curriculum matters are on the agenda, devoting some time to discuss general principles of the curriculum areas in question. Giving some (focused) time to discussion of shared goals and objectives before moving to safer practicalities and specifics.
- good meeting management, including appointing a skilled chairperson (perhaps a school board co-ordinator would do), having a focused agenda, and circulating some materials, including professional reading, beforehand.
- patience, because meetings between teachers from the two sectors often begin cautiously. As we saw in the last chapter, elementary and secondary teachers often have somewhat stereotyped views of each others' practices and fence cautiously around each other to begin with (ILEA 1984). Trust and openness take time to build. The first planning meetings will not likely be entirely successful. Early superficiality should be anticipated and will need to be tolerated.

One final and extremely important factor to increase the likelihood of successful liaison meetings is:

- establishing norms of collegiality and collaboration. Judith Warren Little (1984 1989) argues that significant changes and improvements of any kind in education are only likely to happen where what she calls "norms of collegiality" prevail in a school; where teachers plan together, help and support each other, exchange materials and resources, and even work together with children. Unfortunately, most schools are still dominated by norms of privacy, autonomy, and non-interference among teachers. These "norms of privacy" have profound implications for teachers' working relationships concerning issues of transition. Firstly, in a vertical sense, they restrict the depth and openness of communication and discussion between secondary teachers and elementary teachers, because secondary schools do not want to appear to be "dictating" to their elementary counterparts. (Gorwood 1986; Stillman and Maychell 1984). Secondly, in a horizontal sense, teachers within secondary schools seldom communicate across departments, have little understanding of what their colleagues do, and therefore find it hard to act in any united and consistent way when developing policy that affects their school. To a lesser extent, Stillman and Maychell (1984) found that this also applies to their elementary school colleagues. This aspect of liaison and teacher collaboration is exceptionally important but little understood. For teachers to communicate and collaborate effectively across schools, they must also communicate and collaborate effectively within them. Developing effective transition and liaison meetings is, in this sense, more than merely a matter of agendas and procedures. It reaches right down to the culture of each school that is involved in transition, and the working relationships that make up those cultures (Hargreaves 1989).

- Elementary and secondary teachers working together can have a powerful effect on the transition. It is not just talk, but work that binds teachers together in the development and pursuit of common understanding and common goals (Measor and Woods 1984; Wood and Power 1984). In terms of teacher learning, experience works much more effectively than persuasion (Fullan 1982). Activities are more educational than arguments (Lieberman 1986).

Innovations that are helpful in developing this sort of shared experience between elementary and secondary teachers include:

- school visits by involved teachers
- visits of teachers and students to the partner school
- secondary teachers having teaching responsibility in one or more of the feeder elementary schools, either on a concentrated basis shortly before transfer, or as a regular assignment
- joint appointment of certain teachers between elementary and secondary school who can serve as "link" teachers
- exchanges of staff between "related" elementary and secondary schools on a longer term basis of a semester, or a year
- jointly planned and taught projects and experiences for students (e.g., science fairs or residential experiences).

Innovations such as these help considerably to break down stereotypes and to develop openness and trust across the elementary-secondary divide (Gorwood 1986; ILEA 1984; Stillman and Maychell 1984; Freund 1985).

◆ Teacher training can also help foster the breadth of understanding and experience that would improve liaison and continuity between elementary and secondary education. The fact that most teachers are currently certified to work in only elementary or secondary schools magnifies the division between the two cultures of schooling.

Certification to work at both levels might alleviate some of the problems (though it might require a longer teacher-education process). Another route to encouraging teachers to gain experience (and not just additional qualifications) at both levels would be to require such experience as a prerequisite to principalship.

Training teachers in the specific skills and qualities required for working with early adolescents in the Transition Years is another possible strategy, one that is advocated particularly strongly by supporters of separately established middle schools. For instance, a survey of members of the National Middle School Association described the most effective middle or junior high school teacher as a person who genuinely likes and respects people, who is committed to working with young people in transition from childhood to adolescence, to listening and talking to them, and to assisting in their development of positive self-concepts (Steer 1980).

The Task Force on Education of Young Adolescents recommends that middle-level teachers learn to work as members of a team, that they be given the opportunity to understand pre-adolescent and adolescent development through courses and direct experience in middle-grade schools, and that they receive instruction in the principles of guidance to enable them to serve as advisers. The task force advocates certification in middle-grades teaching in order to give legitimate status to middle-grades teachers. Certification at this level, they say, will also encourage universities to offer specialized courses in middle-grades pedagogy (TFEYA 1989).

Whichever strategy is adopted -- certification and training specifically geared to the Transition Years, or encouraging broader experience and understanding among teachers as a whole -- a review of the certification process seems appropriate as one way of establishing collaboration among teachers for continuity in the experience of students.

In summary, an increase in meetings and joint curriculum planning between elementary and secondary school levels may help create a stronger bridge between the two cultures of schooling. However, elementary and secondary teachers may ultimately need to "walk a mile in each other's shoes", to spend time working in each other's schools, if they are to gain a sufficiently deep understanding of that culture which is not their own.

Recordkeeping

Another way for teachers to liaise about student progress is by exchanging information. Student records are one of the key items of information teachers pass on to one another. Cheng and Ziegler (1986) argue that records of students leaving elementary school should be made available to secondary teachers to show them what incoming students already know. They should be sent, along with samples of students' work, in time for secondary teachers to plan the fall semester. Progress reports should in turn be sent by the secondary school to feeder elementary schools. The exchange process, they say, should run in both directions.

The Committee reporting on the quality of secondary education in the Inner London Education Authority (ILEA 1984) found that use of student records was most successful when:

- records are passed on no later than half-way through the summer term so there is ample time for secondary teachers to consult them and program accordingly;

- records are passed beyond administrative staff to subject teachers themselves, the ones who actually teach the students. This should happen in every instance of transfer.

- some more sensitive information is not widely distributed to all and sundry, but sent only to the relevant guidance or administrative staff;

- formal records are augmented by larger profiles and portfolios of children's work to give a sense of the children's strengths and weaknesses.

The most important issue of all for student records is when and how secondary teachers use them. No matter how elaborate and systematic a student record may be, it is of no value whatsoever if no one uses it. Stillman and Maychell (1984) found that many schools do not use their student records. They believe in the "fresh start" philosophy. If they consult them at all, they do not do so until Christmas. This, observes the Inner London Education Authority Committee (1984), can have a backwash effect on elementary teachers themselves. If they perceive that their secondary colleagues make little use of the records they send, then they may see little point in taking the task of filling them out very seriously. Generally, the Committee found that:

> the schools between which information about pupils is transmitted most successfully are those in which records are passed on and distributed as appropriate, but which also make personal contact about any children for whom recorded details need elaboration (ILEA 1984).

Records are not a bureaucratic substitute for communication, but an important part of the wider process of understanding and liaison between elementary and secondary schools. Secondary teachers are more likely to take student records actively into account in their programming and their planning when:

- they trust their elementary counterparts. This trust, we have seen, is built not on bureaucratic procedure, but on shared experience and joint work that bridges the cultural divide (Stillman and Maychell 1984).

- secondary teachers know their own criteria are being actively taken into account by elementary teachers when the records are being written. For this reason, the Inner London Education Authority Committee (1984) recommended that Heads of English and Mathematics departments communicate information about the attainment and progress of the previous year's incoming students back to the feeder elementary schools by Easter, so that these factors can actively be taken into account in writing the new round of reports (ILEA 1984).

- the reporting system is integrated with the assessment system as a continuous record of student progress, to lend greater weight to the information being passed along (Hargreaves et al. 1988; Broadfoot et al. 1988). Ways of achieving this will be described in more detail in chapter 5.

Student records need to be well-written. But, ultimately, they are only as good as their readers. Considerable effort is often expended on the design of student records. Countless hours of elementary teachers' time are devoted each year to compiling them.

If the records have no readers, all this precious energy is wasted. If as much effort could be channelled into ensuring conscientious use and interpretation of student records as is channelled into their compilation, students would benefit immeasurably from the improved programming that would almost inevitably result.

Induction Schemes

Transition, as we have seen, is both a short-term and a long-term phenomenon. In the short term, the effort to assist students focuses on inter-school transfer and, more specifically, on orienting students to their new environment. One of the aims of orientation is to decrease students' feelings of apprehension and alienation (Ascher 1987).

The Inner London Education Authority report recommends involving elementary teachers more in planning pre-transfer visits, preparing pupils, and then accompanying them to the new school. It suggests longer visits, incorporating more active experiences, and visiting the secondary school when it is working normally (ILEA 1988). Bulson (1984) suggests that Grade 8 students be given exposure to high school curricula through visits to secondary schools. To alleviate identified concerns, students also need clear information on homework and attendance policies and training in exam-writing skills. Some prior experience with class rotation and exam writing in Grade 8 may help accustom students to secondary school practices. It should be noted that Ontario education policy allows certain Grade 8 students to enrol in one or more secondary courses (OSIS 1989).

Other types of orientation programs have proven helpful. A March-to-November program for parents, students about to transfer, and their elementary teachers, designed by an Indiana middle school, resulted in significant improvements in parent-school relationships (Deller 1980). Cheng and Ziegler (1986) found that summer head-start programs and summer camps for incoming students received positive evaluations in empirical studies. Ontario policy allows summer school credit courses in subjects which students have not previously studied, summer courses that allow students to move from one level of difficulty to another, and courses that meet educational needs not met by a current guideline (OSIS 1989).

Parents should be seen as potentially valuable sources of information about their children's progress and adjustment in transition (ILEA 1988). Individual parent-counsellor conferences before transfer have received positive evaluations, as have peer-group orientation programs and clear, fair, well-communicated policies on student behaviour, homework, discipline, and academic standards (Cheng and Ziegler 1986). The same authors advocate that transition be a concern of the whole school -- teachers, administrators, nurses, students, and their peers -- not just guidance staff (Cheng and Ziegler 1986).

Measor and Woods (1984), recognizing how important the informal peer-group culture is for transferring students, suggest that schools allow and encourage students to become more actively involved in the management of the transition process, not just during induction. Secondary students could, for instance, author an "alternative guide" to help their transferring counterparts orientate themselves to secondary school.

Personal and social development programs, led by home-base teachers during the first days of secondary school, can also actively involve students in the induction process (e.g., by sending them with maps, in groups, to find their way around the school) (Hamblin 1978; Baldwin and Wells 1981). Such programs can be a useful adjunct to the basic administrative work and general "chats" that otherwise normally make up the first days of secondary school (Galton and Willcocks 1983).

Induction days sometimes form a dramatic, even glitzy, part of a secondary school's overall induction program. These special days with their flashes and bangs in the science display, the impressive gymnastics performance in physical education, and the like, can create a real sense of eagerness and anticipation among the transferring students about the excitement ahead. In a sense, such induction days can be seen as "warming up" the students for the passage, making it an attractive, desirable one (Freund 1985). Insofar as they alleviate anxiety and create positive attitudes to transfer, induction days have real advantages. But they also carry dangers. The chief danger is one of disenchantment. In an interview case study of student transfer from the British equivalent of the Transition to the Specialization Years, Thomas (1984) found that the anticipation and excitement generated about the prospects of more independent learning quickly turned to disillusionment when worksheets and dictation were found to prevail; when the school could not deliver on its promises. This points to the importance of there not being too great a discrepancy between what students experience on their "induction day" and what they are likely to experience in the remainder of their secondary school career.

Institutional Reorganizations

One commonly proposed solution to the problem of meeting the special needs of the Transition Years is to create an institution specially for that critical period of development for young people -- one which would protect them, insulate them, and smooth the transition between childhood and adolescence. Such an institution, it has been proposed, is the middle school.

Research and other literature on middle schools is hard to evaluate. Much of the favourable literature is associated with organizations that have adopted a position of broad advocacy in relation to middle schools, such as the National Middle School Association and the Saskatchewan Middle School Association (George and Oldaker 1985; National Middle School Association 1982). Other literature is less consistently favourable in its findings.

Hawkins et al. (1983) reviewed the literature on grade grouping in an attempt to illuminate its effects on student achievement, parent and student satisfaction, program costs, student attitudes and self-concept. Its authors could not draw definite conclusions due to inconclusive data, inconsistent findings, and a lack of relevant empirical studies.

A later literature review suggested no definitive and generalizable research findings on the merits of middle schools over junior high schools (Pugh 1988). It stated that a decision to convert from junior highs to middle schools based solely on the literature would not be valid. Similarly, a study of Ontario intermediate schools, undertaken by the Ontario Institute for Studies in Education, in 1972-73, found that grade grouping did not significantly affect transition from the intermediate level to the secondary level (Chellew et al. 1973). In a recent study of patterns of curriculum and instruction in junior and high and middle schools, Tye (1985) found very little differences between the two types of institution.

Researchers of the English middle school have found its claim to offer students a smooth transition more rhetoric than reality. Using different research methodologies with different samples and settings, all these authors found that, in the middle of the middle, at exactly the point where the division between elementary and secondary education had formerly been, there was not a smooth transition at all, but an abrupt break. The frequency of homogeneous-ability grouping increased sharply as did the incidence of subject-specialist teaching and the number of teachers with whom students had contact (Hargreaves 1986; Hargreaves and Tickle 1980; Taylor and Garson 1982; Meyenn and Tickle 1980). Hargreaves (1986) attributes the existence of this break to the fact that middle schools emerged less for reason of educational idealism than for reasons of administrative convenience (they were cheap!); that the schools had few teachers who had been specifically trained for the middle years; and that most middle school teachers had been recruited from former elementary or secondary schools and still worked in the years of the middle school that corresponded most closely with their former experience.

Some evaluations are more positive, however. A national survey of principals and seventh grade teachers in the United States, found that seventh graders in Grade 6/7/8 middle schools, in comparison with the same grade group in Grade 7/8/9 junior high schools, were somewhat more exposed to organizational structures and teaching practices that are in theory more appropriate for high-order learning and social development (Braddock et al. 1988). After middle schools were implemented in 1980 in St. Louis, student attendance improved, students scored higher on achievement tests, and there were fewer discipline referrals and fewer student suspensions (Wiles 1982). However, since the evaluation was done only two years following implementation, the longer term impact of middle schools is unknown.

Simmons and Blyth's (1987) research points to some long-lasting disadvantages of the junior high school transition in a large city, especially for girls, and suggests some advantages of K-8 systems. They argue that middle schools make the transition easier because it occurs before puberty and involves a move to a building which is usually smaller than a junior high school. Earlier transition has the advantage of coinciding less with other adolescent changes, reducing the cumulation of change, and involves a less dramatic increase in the numbers of peers and older students.

Perhaps a trade-off is involved in the choice between middle schools and junior highs schools. McPartland's (1987) comparision of the effects of self-contained classroom instruction and departmentalization found that self-contained classroom instruction benefited student-teacher relations at a cost to high-quality subject instruction, while departmentalization improved the quality of subject instruction at a cost to student-teacher relations.

The research evidence on middle school systems, then, appears to be not sufficiently positive or negative to warrant their wholesale implementation, or indeed their unscrambling, as a response to the problem of transition.

Middle schools offer possibilities, not guarantees. Where they fall short of their ideals, this may be due, not to inappropriate goals, but to problems in meeting them because of shortages of specially trained staff, external pressure for accountability, real or perceived expectations of the schools that are to receive middle-school students, and so on (Hargreaves 1986). What is important for students at this stage is not the walls within which they work, nor even the name given to the building that those walls make, but the quality of teaching, learning, and personal care that goes on within them. In this respect, changes made within the early years of secondary school may be just as effective for student progress and adjustment as changes made to the whole infrastructure of schooling. These changes within secondary schools are our last concern in this chapter.

Secondary School Restructuring

The chief issue surrounding transition is, as we saw earlier, probably not short-term anxiety, but the longer term consequences that movement to secondary school has for students' motivation, achievement, and their willingness to stay in school. It is becoming increasingly accepted that the seeds of dropping out are sown early (British Columbia Ministry of Education 1989). Some of these seeds are to be found in patterns of curriculum and instruction that are ill-suited to the needs of many less academic, non-college bound students -- the subject of our next chapter. But the seeds are also to be found in the alienating isolation and lack of corporate and community attachment that characterizes the experience of many students who transfer to secondary school. This section addresses measures developed or proposed to respond to this second set of problems. Apart from curriculum and assessment reform, four broadly interrelated measures have been adopted as a constructive response to the problem of transition:

- ◆ reducing school size to create a more intimate, supportive environment
- ◆ creating mini-communities within larger schools, for the same reason
- ◆ developing a sense of "home" in the school, where people care about students' personal and social development

◆ Reducing School Size: A study of school transfer in New York City found that some of the problems of transfer stemmed from the immense size of the school system and its rigid bureaucratic structure (Cohen and Shapiro 1979). Similarly, Simmons and Blyth (1987) found that large school size has a direct, small, negative impact on self-esteem of both male and female junior high school students in Grade 7. Movement from a small intimate school to a less intimate, larger, and more heterogeneous environment creates difficulty for children. McPartland et al. (1987) reported that small schools with staff organized by self-contained classes or by functioning interdisciplinary teams had more desirable teacher-student relationships than did large, departmentalized schools (supported by Davis 1988; Pinkey 1981).

- Creating Mini-Schools: Small schools, even where they can often be shown to be desirable, are often prohibitively expensive to construct and may pose problems of establishing sufficient diversity in the program. The same supportive effects that a small school offer, can be created by other means. To reduce the discontinuity between the self-contained elementary school and the departmentalized mode of high school many sources in the literature recommend the creation of "schools within schools" or "houses" (Lake 1988a). In addition to creating a less impersonal climate, such an arrangement allows the maintenance of peer friendship groups, reducing another aspect of discontinuity in school transfer (ILEA 1988).

The U.S. Task Force on Education of Young Adolescents (1989) suggests that schools be divided into houses of 200 to 300 students each, comprising a cross-section of the school population (i.e., ethnic and socio-economic background; levels of physical, emotional, and intellectual maturity). Students would remain in the same "house" as long as they are enrolled in the school, thus creating a stable cluster of peers and teachers. Each "house" would be supervised by a "house leader". The school, in turn, would be managed by a building administrator (the former principal) assisted by a building committee comprised of teachers, administrators, support staff, parents, students, and community representatives (TFEYA 1989). "Houses" could be organized on an annual basis or continue throughout a student's tenure in the school (Simmons and Blyth 1987). Even if students took most of their classes within their "house", they might still leave it for specialized subjects, such as music, languages, science, health, and physical education (Burke 1987).

Other sources in the literature suggest different arrangements. Students could be assigned to a different "house" each year (Simmons and Blyth 1987). Such a structure could be used in the first years of secondary school, with students belonging to the same class grouping and having the same teachers for a number of periods (Cheng and Ziegler 1986). Presumably, the school structure in later years could still approximate a more traditional secondary arrangement, with subject-oriented departments and individual student timetables.

There is evidence that "schools within schools" programs produce significant achievement growth, improve attendance and behaviour, and generate student, staff, and parent satisfaction (Burke 1987; McGanney 1989; Moon 1983). The increased teacher-student interaction they enable has been shown to improve student motivation (Cheng and Ziegler 1986). Evans (1983) investigated the effectiveness of transition subschools and concluded that they assisted in the integration of new students into the larger school and proposed a sequential model of integration.

One possible problem with "houses" is mentioned by the Inner London Education Authority report on school transfer (ILEA 1988). With several "houses" in a middle or secondary school, there is not always one particular teacher with whom primary teachers are to liaise. The report recommends that schools with "houses" establish clear arrrangements for liaison with elementary schools concerning student transfer.

Ontario education policy does enable a structure which might accommodate "schools within schools". It recommends that students who share common courses be grouped together for part of the school day, while the balance of their timetables is individual (OSIS 1989).

Establishing mini-schools has important implications for curriculum and instruction which will be explored briefly here, then discussed more fully in the next chapter.

The Task Force on Education of Young Adolescents (1989) advocates teams of teachers and students within "houses". It suggests a minumum of five teachers for every 125 students (one for every 25 students). Teachers would share responsibility for the same group of students. Such an arrangement would help build interpersonal bonds. Teams could also function as support groups for teachers. The California Task Force on Middle Grade Education also recommended collaborative team planning which evolves into interdisciplinary team teaching (Lake 1988b). In British Columbia, the policy document, Year 2000: A Curriculum and Assessment Framework for the Future has prescribed the division of the intermediate core curriculum into four broad strands of sciences, humanities, practical arts, and visual arts, in part so that they can allow teaching by theme rather than teaching by subject in the Intermediate Years.

Ontario education policy appears to enable teaching teams. It encourages integrated learning experiences, integrated units, themes, and areas of study (OSIS 1989). Ontario policy also encourages small and/or remote elementary and secondary schools to share facilities, personnel, and equipment (OSIS 1989), an arrangement particularly suited for schools in rural areas. The literature documents such an arrangement for a school serving several small towns in rural Massachusetts. A middle school program takes place in one wing of a regional high school as well as in classrooms in five elementary feeder schools (Benander 1982). One implication of this sharing between middle-level and secondary schools of the same physical space and office personnel is the potential benefits for school transition.

The creation of mini-communities for the Transition Years in secondary schools would appear to have positive benefits for students in these years, especially when such measures are linked to the development of smaller teaching teams and more integrated subject matter.

- Developing A Sense of Home: Aside from the establishment of mini-schools or smaller teaching teams, there are some quite specific, focused reforms that secondary schools can make to give their students a stronger sense of home and of attachment to their school.

One way of achieving this, McPartland et al. (1987) suggest, is through a mentor system involving regularly scheduled meetings with students. Many sources in the literature, in fact, recommend that teachers be matched with individual students for the purpose of providing advice on academic and personal needs. The aim is to help students by providing each of them with the support of a caring adult who knows them well (TFEYA 1989; Bloomer 1986; Lake 1988a). Such a measure addresses preadolescents' need for adult guidance and support.

The Task Force on Education of Young Adolescents (1989) describes how a teacher-adviser program might work. The Task Force advocates having teacher-advisers as part of a team-teaching structure. Advisers would receive in-service training in adolescent development and principles of guidance. Teacher-advisers would not do formal counselling (which would remain the domain of mental health professionals) but would act as mentors and advocates for students. Guidance counsellors would assist advisers in their roles. Teacher-advisers would be the primary contact between the school and parents. In that role, they would collate grades and comments from other teaching-team members, enter them on students' report cards, and discuss them with parents. When behaviour problems arose, the principal would consult the adviser assigned to the student in question before taking any action (TFEYA 1989).

Ontario education policy currently provides for each student to relate to a teacher who can indeed act as an adviser. In Grades 7 and 8, it is the homeroom teacher who takes responsibility for guidance of a group, as well as making decisions that relate personal needs to learning needs. The homeroom teacher maintains close contact with each student (OSIS 1989). Under such a system, however, teacher-adviser relationships normally change each year, reducing continuity in the relationship between students and their advisers. In addition, students are unlikely to be able to choose their advisers, nor to change advisers if they feel that is necessary.

Strengthening the role of the homeroom teacher can nonetheless do much to provide an atmosphere of care and a sense of home for students in secondary school (McPartland et al. 1987; Kefford 1981). The role of the homeroom teacher is often not designed to foster students' personal and social development. Administration, form filling, announcements, and messages, along with loosely structured, general "chats" have often consumed much of homeroom time (Blackburn 1975). The personal and social development needs of early adolescents have not traditionally been a homeroom teacher's priority. Strengthening the homeroom teacher's role is not just a matter of providing more time. Unless objectives of what the role should achieve are developed, finding something to fill up the time in homeroom period can become a problem (Baldwin and Wells 1981; Button 1981; Hargreaves et al. 1988).

A homeroom "curriculum" focused on the personal - and social - development needs of the early adolescent in a supportive-group context, is one way of making constructive use of homeroom time. In the United States, Simmons and Blyth (1987) argue that one way to build self-esteem is to help students achieve peer-regard and to give them social support. In Britain, a whole range of sophisticated "tutorial" programs for homeroom use have been commercially developed. Such programs dedicate a considerable amount of active, co-operative groupwork in homeroom time to the development of generic skills and attitudes like listening skills, leadership, and trust; to specific school-based matters like bullying or the management of homework; and to other social issues, such as gender and race stereotyping (Button 1981; Hamblin 1978; Baldwin and Wells 1981). Critical evaluations of these programs have been broadly positive (Bolam and Medlock 1985).

The Task Force on Education of Young Adolescents advocates adolescent involvement in community service inside and outside school as another way of building self-esteem (TFEYA 1989). Ontario education policy also advocates such service as a way of helping adolescents move toward independence, broadening their learning experience outside of school (OSIS 1989). The community, generally, is seen by many writers not merely as a resource for learning, but also as a source of attachment, connectedness, and motivation in the lives of students (Marx and Grieve 1988). Lawton, Leithwood, et al. (1988) stress the importance of strong links between the community and the school in ensuring effective schools. The City of Toronto Board of Education has produced programs for secondary schools in response to the need to involve parents in such activities as helping their children with course selection. David Hargreaves (1982) argues that the emergence of the community school may be the vehicle to seal the gap between home and school, especially where the community school classroom contains people of various ages and interests, helping to break down the careful age-grading currently existing in most secondary schools.

Epstein (1988) introduces the concept of "schools in the centre", through which schools can promote interaction with the community by:

- encouraging mutual-help relationships between students and senior citizens;

- providing information to parents on adolescent development, school programs and goals, how to help children succeed in school, parenting approaches, community resources for families, and by inviting parents to bring their skills to the school;
- forming partnerships with local employers to allow students to explore career options.

Cheng and Ziegler (1986) encourage administrators to make themselves accessible to students and their parents and to create opportunities for informal socializing among staff, students, and parents. Licata (1987) suggests three very specific ways of doing this -- lunch with the principal for each student, a week-long camp to build school social ties, and a physical education Olympics.

Summary -- Responding to the Transition Process

Transfer is something to be eased. Transition is something to be developed and improved. We have discussed practical ways of doing both these things in this chapter, some of them very specific, others more broad and ambitious. Even in the case of very specific changes, though, we have found that deeper principles beneath them have generally needed to be addressed. Effective meetings between teachers from the two sectors depend not only on the practicalities of paper procedures, but also on the degrees of trust and knowledge that teachers have of one another's practice -- not merely across the elementary-secondary divide, but within their own particular milieu as well. This means that an important prerequisite for effective communication across the elementary-secondary divide, may be highly developed forms of collegiality among teachers on each side of the divide -- quite a tall order!

Administrators looking for quick procedural solutions to the problems of transfer and transition are likely to be disappointed. Before very long, their change efforts will need to address the deep principles underlying the specific innovations that they are trying to implement. Administrators who thought they were faced with just a few changes in procedure, have often later found themselves with the challenge of changing their whole school. If substantial and significant improvements to education in the Transition Years are to be secured, the underlying principles, the deep structures of secondary schooling in particular, will ultimately need to be confronted.

Two of the most fundamental underlying principles of secondary schooling, two of its most "sacred" features, are its prevailing patterns of curriculum and assessment. We will examine these in the next two chapters.

CHAPTER FOUR

CURRICULUM AND INSTRUCTION

THE PROBLEM OF CURRICULUM

In the previous two chapters, we saw that what is now commonly believed to be a major crisis in secondary education is in many respects a crisis of community -- a crisis of students feeling detached from their peers, from their teachers, and from their schools. But there is another side to the crisis. The crisis of secondary education is also a crisis of curriculum. The issue is one of the failure of programs in secondary schools to engage the interests of many of the students, particularly those who are less strong in academic achievement. For too many students, secondary school is "just boring" and they cannot wait to leave. Whatever disagreement there may be over how to define a "dropout" or how to calculate the dropout rates (Lawton and Leithwood 1988; Mann 1986), one of the reasons students leave secondary school early is their disenchantment with the program and how it is presented.

John Goodlad's (1984) study of 525 high school classrooms in the United States found that a typical class witnessed a lecture format that was generally divided into five activities -- preparing for assignments, explaining/lecturing/reading aloud by the teacher, discussing, working on assignments, and taking tests. Metz (1988), in her study of eight high schools, also noted the universality of high school classrooms with little variability among buildings and room set-ups, sequencing of subjects taught, texts, and methods of instruction. Cuban's (1984) historical analysis of American education shows that high schools have essentially remained unchanged since the turn of the century in such areas as length of class periods, duration of program, and subject specialization. He found that even such elements as furniture arrangement, grouping students, and the amount of physical movement students are allowed within the classroom have seen few changes. Junior high schools have not fared any better. In his study of 12 American junior high schools, Tye (1985) concludes that:

> According to student and teacher reports and according to observation data, junior high school students in classes in all subjects in our sampled schools

> spent large amounts of time listening to the teacher. In addition to this, the most common activity, they also wrote answers to questions a lot and often took tests or quizzes. Less often, they wrote reports, read or were involved in discussion. In short, they were almost always involved in passive and traditional activities. Activities such as simulation and role-play were non-existent.

Hargreaves (1982) likens the cumulative effect of this sort of experience to watching lots of old television shows, sometimes even reruns. Tye (1985) compares it to watching long Andy Warhol movies of extraordinary tedium which portray banal events like a haircut in protracted, uninspiring detail. Tye concludes that much of junior high school life is like this for the student -- a typical six-period day is like a long, long film running 330 minutes.

Clearly, in this kind of context, we can begin to understand some of the difficulties that underachieving and at-risk students experience in secondary school. But does this mean that their "more able" peers are any better placed or that the presentation of the curriculum is any more interesting and motivating for them? When the able achieve, we naturally tend to assume there is no problem. Yet there is evidence that, at the secondary school level, many able and successful students are equally disillusioned with the quality of their school experience. Data on this issue are provided by John Gray and his colleagues (1983) in a large study of Scottish secondary schools. In that study, the researchers administered a questionnaire to over 4000 secondary students who had taken their "Highers", a university-based examination taken towards the end of secondary schooling. Students in the sample were asked to rate ten different study methods or types of teaching-and-learning activities in terms of the frequency with which they had encountered them and in terms of their enjoyment of them. The most common single method of study was "exercises, worked examples, proses, translations" (72%), followed by "having notes dictated to you in class" (60%), "using duplicated notes" (49%), and "reading" (47%). The least encountered methods of study were "practical activity" (17%), "class or group discussion" (14%), and "creative activity" (12%), yet these were listed among the most enjoyed methods.

In a longitudinal case study of successful students entering the English "sixth form" (approximately Grades 11-13), Thomas (1984) found that, despite being "warmed up" on entering this status passage by teacher promises of intellectual excitement and university-style tutorial relationships, in practice, the presentation of the curriculum and structure of learning was much the same as earlier in their secondary school career. Generally, teachers dictated, gave out worksheets, and demonstrated experiments. Many teachers of these able students were what Thomas called "tedious talkers" -- teachers who conducted long monologues from the front, giving students little opportunity to participate. She describes how, because of the absence of any real participation, these teachers would try to generate enthusiasm by creating "imaginary participation", punctuating their monologue with responses to imaginary questions and inserting phrases like: "No really, this is true" or "I know you'll not believe this but...".

Among academically successful students, conformity is easily mistaken for commitment. Hard work is frequently interpreted as a proxy for interest. Yet many successful students are like the students studied by Thomas, not so much enthusiastic as bored, indifferent, insouciant, or instrumentally focused on getting their paper certificates.

High-achieving students in secondary school, it would seem, are not motivated so much by the quality of the instruction or the fascination of the material itself, but by the inner drive or need for achievement that psychologists of education like McClelland (1987) have documented in such detail over the years. This motivation is more a product of the cultural background of these students themselves -- a need for achievement or expectation of achievement that is so strong that it will supersede even the most unnurturing educational environment.

Dropout rates are most common among students not of low-, but of average-measured intelligence (Lawton et al. 1987). With increasing dropout rates even among more academically proficient students (Wehlage and Rutter 1986), there are signs that even this inner need for achievement may no longer be sufficient to carry them through. The kinds of curricula and instruction in secondary school that have been a problem for the less academically proficient student, may also be becoming visible problems for the more academically proficient one. The research and literature suggest that, in many respects, secondary schools often fail to retain students probably because they never really engaged them in the first place.

In broad terms, there are three ways in which secondary schools and their curricula often fail to engage students in the intrinsic commitment to learning. We describe these as:

- the problem of relevance
- the problem of imagination
- the problem of challenge.

The Problem of Relevance

In a Newfoundland study of secondary school students and their experience of school, family, and community life, Gedge (in press) found that the students from working-class communities, whose life and work were mainly focused around fishing, found little in their experience of secondary school to excite or interest them. They withdrew psychologically from a curriculum which in history, for instance, was centred on staid texts, with stilted prose that dealt with potentially engaging and exciting historical conflicts in but a few lines of bland and banal summary. Home and work life offered more interests and rewards. While these students' parents valued education in the abstract, and the opportunities it could open up, their sons and daughters saw no value in education as they experienced it in the concrete, day-to-day routines of the schools. Connell and his colleagues (1982) found similar patterns among working-class youth in Australia.

One interesting finding of Gedge's study was that teachers rated these students, their behaviour, and their ability lower than did the students themselves, their parents, and other people in the community who knew them. Similarly, in Ontario, Karp (1988) found that when dropouts, their parents, employers, and teachers were asked to rate the dropouts in terms of qualities like responsibility, curiosity, and ambition, only their teachers viewed them negatively. This could be because their teachers were overly harsh and critical, but it is more likely the result of accurate observations of how these young people behaved in the context of their schools and classrooms. This is an important insight. What can appear like a generic problem of the students and their background, may well be a very specific matter of those students' response to their experience of secondary schooling and its curriculum. As King et al. (1988) point out, in the context of Ontario, it is program that is responsible for much of what we call the dropout problem. The Radwanski report (1987) sums up the "dropout" problem as follows:

> the crucial factor is the students' perception of how the system responds to ... weak performance -- with indifference or hostility -- coupled with their sense that what they are studying is not worthwhile or interesting enough to justify persevering in the face of difficulties.

We know this because students do not display these responses equally in all areas of the curriculum. Gedge (in press), for example, notes that the working-class students he studied responded much more positively to their English classes, classes which engaged more dynamically with their own experience, than they did to other areas of the curriculum. In Australia, Power and Cotterell (1981) also found that transferring students adjusted more readily to their English curriculum than they did to many other subjects.

The problem for potential "dropouts" in secondary school, it would seem, is a problem of continual exposure to what Hargreaves (1982) in Britain, and Adler (1982) and LeCompte (1987) in the United States, call a watered-down academic curriculum, taught in a predominantly didactic, or individualized worksheet-based way, that is fragmented, disconnected, and engages little with student interests and enthusiasms. On these grounds, the principle of relevance would clearly warrant inclusion on any curriculum reform agenda for the secondary school.

The Problem of Imagination

Relevance is not the only important principle of learning missed by a watered-down academic curriculum that is overly didactic. In a challenging analysis of the principles of curriculum planning, Egan (1988), from Simon Fraser University, argues that relevance is not the only or even the best key to learning. Imagination, he says, is one of the most neglected elements of curriculum planning. Commonly placed on the sidelines, or treated as a sort of frill, or confined to particular areas of the curriculum like English or drama, imagination, says Egan, should form one of the central principles of curricular planning. The curriculum, he argues, should be seen, not as a set of objectives to be reached, but as a set of stories to be told. Storytelling, in fact, should be at the heart of teaching, not in terms of what the teacher actually says, but in terms of how the learning is structured.

Egan justifies this view by noting that what often interests young people is not their immediate world at all -- not the local community, the pollution in the lake or whatever. What often interests young people, rather, is an imaginative world of fantasy --- as a momentary reflection on the popularity of video games or role-play games like Dungeons and Dragons will testify. Through this fascination with the world of imagination, Egan continues, young people have a fundamental grasp of basic general structures of thought and an understanding of concepts like the conflict between good and evil, the contrast between light and dark, and the basic structure of "stories" themselves as ways of arousing dramatic interest in apparently insoluble problems and unresolvable conflicts, then finally resolving them.

The importance of storytelling as a principle of curriculum planning, argues Egan, is in the use of the world of fantasy and imagination as content for study, and also in the use of the basic properties of storytelling as a structure for planning.

In the first case, Egan argues, links to the fantastic as a starting point for learning can be made in many other areas than English. Social studies is one obvious case, but science too can appeal to young people's sense of wonder and fascination with fantasy. The worldwide popularity of Stephen Hawking's (1988) book, A Brief History of Time, illustrates how the public's interest in even the most esoteric aspects of physical science can be secured by appealing to people's imaginative fascination with the nature of time. How much more interesting to approach the seemingly mundane topic of "light" in physics through discussions about time or stories about time travel than through pinhole cameras and prisms. As a starting point for learning, imagination in this sense is one of our most under-used resources.

The capacity to harness the power of imagination in Egan's second sense is also under-exploited. As we shall see, the curriculum is too often presented as a fact, not as a problem. Curriculum material is content to be covered without indications of any uncertainty that it may engender. Particularly in subjects like science, there is little sense of the conflict, the excitement, the anticipation, and the ultimate satisfaction in scientific discovery. A Beaton et al. (1988) student survey of high school science teachers indicated that teachers saw themselves primarily as providers of content. The survey also noted a limited range of instructional strategies and methods of evaluation.

Egan's argument adds a second powerful ingredient to the ways of engaging student interest in the curriculum. Relevance is the most popularly voiced mechanism for doing this. But as Egan points out, the principle of relevance can sometimes degenerate into mediocre descriptive studies of self, of family, and of community. Imagination, we have seen, is an equally important principle of learning right across the curriculum and should also be taken into account in the process of curriculum reform.

The Problem of Challenge

In a study of five United States school districts, Firestone and Rosenblum (1987) reported that "deals" were frequently made between teachers and students where low academic standards were traded for quiet. Similar findings are reported by Goodlad (1984) and by Tye (1985). In research on school effectiveness, having high but achievable expectations of students is one of the most consistently cited factors associated with positive student outcomes (Purkey and Smith 1983; Mortimore et al. 1988). Conversely, low expectations are associated with negative outcomes.

Absence of challenge is a third way that secondary schools often fail to engage their students' interests and involvements. By challenge, we mean what is in everyday language often understood as mastery. We do not mean mastery in Bloom's (1971) sense of "mastery learning", where mastery is defined in terms of particular educational objectives that students are expected to cover and achieve. Mastery in that sense really means only coverage or completion. What we have in mind is something more like the dictionary definition of mastery: "evident skill, superior dexterity" -- something substantial and significant, not just something completed, something done, but a process of facing and overcoming immense personal challenges.

This kind of challenge within secondary education can sometimes be seen in out-of-school settings. In a review of programs of outdoor and residential experience (including community and co-operative education programs), Hargreaves et al. (1988) point to the significant sense of challenge and achievement that many academically less-able students face when climbing a rock face or dealing with a crisis in the workplace. These encounters with real and not contrived challenges often had dramatic effects on student self-esteem and attitudes to school. Sadly, these are usually short-lived, as the particular experience is forgotten and the more ordinary classroom routines of secondary school take over once more.

A key issue for secondary schools in reforming the curriculum is not just how to generate higher expectations in a diffuse sense, but also how to build regular experiences of real and significant challenge into students' experiences of the secondary school curriculum.

Summary -- Curriculum Problems

From the available literature, it seems that relevance, imagination, and challenge may be three key principles of learning that motivate those students who do not show that inner drive to succeed that can often be found among their academically able peers. These three principles of learning, we have argued, are poorly served by the secondary curriculum at present.

RESTRUCTURING THE CURRICULUM

Background

Current initiatives to restructure secondary education and in the present case, the Transition Years, have their immediate roots in the OSIS reform. OSIS was developed and implemented following concerns that students were not being properly prepared for either the world of work or for post-secondary studies. Universities, colleges, and employers perceived that basic literacy, basic skills, and "proper attitudes" had not been acquired by students leaving secondary school. Although those within the secondary education system perceived that students were being adequately prepared to meet the demands and requirements for further academic studies at university or college level, it was felt that the needs of students at basic and general level were not being met. Although the credit system was benefiting advanced-level students, it was not preparing basic- and general-level students for either employment or community college.

While OSIS was intended to offer differentiated programs for individuals, in an evaluation of its implementation, Leithwood et al. (1987) discovered deficiencies at the Grade 9 level. Few schools developed basic-level courses at the Grade 9 level and, therefore, did not provide courses at various levels of difficulty. Moreover, schools varied in the number of compulsory courses they required their students to take.

Advanced, general, and basic programs are intended to meet a range of educational needs. In practice, however, the content and focus of the academic program tends to prevail and students in other programs, especially the general level, get watered-down versions of it (King et al. 1988).

John Gray and his colleagues (1983), in their large-scale study of secondary education in Scotland, explain that this watering down of the academic curriculum has, in many respects, occurred for the best of reasons -- allowing as many students as possible to have access to high-level qualifications. The entry of more and more students into such programs is spurred by the pursuit of equality of educational opportunity. It is also fuelled by what Dore (1976) calls "credentialism". Credentialism occurs when high numbers of students become qualified for an occupation at a particular level. The requirements for the occupation are raised and become inflated. The pursuit of qualifications becomes ever more frantic, increasing the emphasis on educational qualifications in a ratchetlike process. Such a process may explain the expansion of the

Ontario Secondary School Diploma (OSSD) requirement to 30 credits for all students in 1984. This credentialism cannot continue indefinitely. There comes a point when the difficulty of achieving qualifications becomes too great, when course requirements become overwhelming. This, as the Select Committee (Government of Ontario 1988) learned from many of the groups presenting evidence to it, is when dropout rates are likely to increase.

Beneath the dominance of academic curricula are much deeper processes which are, in many respects, responsible for subject specialization in secondary schools, departmentalized structures, and their resistance to change. We will review these now.

Secondary School Academic Orientation

As we mentioned in chapter 2, secondary schools have a very strong academic orientation. Wake et al. (1979), in their comprehensive summary of changes in European education, point out that there is growing awareness that both the existing context of secondary education and the arrangement of it are either outdated or no longer important in contemporary life. They also note, however, that changes do not come easily.

McPartland et al. (1987) refer to a "subject-matter orientation" in high schools through which teachers perceive themselves as experts in particular subjects. They note that teaching practices tend to follow a continuum, from "pupil orientation" at the elementary level to "subject orientation" at the secondary level. Corbett et al. (1987) argue that subject specialization is considered very much a "sacred norm" at the secondary level. As Emile Durkheim (1956) suggested more than 50 years ago, tampering with such norms can create a sense of panic among teachers, as they hold the "sacred" to be unquestionably true.

A number of factors contribute to the strength and persistence in secondary schools of this emphasis on academic specialization and departmentalization:

- Teacher recruitment: Teachers training for secondary education are more subject-oriented than their colleagues training for elementary education (Book and Freeman 1986; Lacey 1977).

- Teacher identity: Throughout their education in secondary school, in university and beyond, teachers become attached to their subjects, developing loyalty toward them. Subjects become a major part of their identity (Bernstein 1971). To challenge their subject and its integrity is to challenge that identity.

- Subject histories: There is a fairly extensive literature on the histories of school subjects (e.g., Tomkins 1986; Goodson 1988; Goodson and Ball 1985). It reveals that school subjects create not just intellectual communities but social and political communities as well (Hargreaves 1989). School-subject boundaries have been, in many ways, arbitrarily defined. What counts as a subject and as valid content for that subject shifts over time, as different communities and traditions fight for influence within the subject (Ball 1983). This process has been throughly documented even for subjects like mathematics (Cooper 1985). We can also see the same kinds of processes taking place in the current struggle between the "literature" and "communication" branches of the English curriculum, for example. With respect to the establishment and defence of subject boundaries, Goodson (1983) describes the irony of geography, which was initially resisted by teachers of other subjects on the grounds that it was "not a real subject". Geography, in turn, then resisted the later establishment of other subjects like environmental studies, on the grounds that they were "not real subjects".

In practice, most of the current secondary school subjects are a legacy of the early twentieth century -- a time when working class students were beginning to take advantage of secondary education opportunities. The United States Committee of Ten's deliberations of 1893 and the English Secondary Education Regulations of 1904 were the key curriculum landmarks of the time (Goodson 1988; Hargreaves 1989; Tomkins 1986).

In many ways, their definition of the secondary curriculum as academic was a way of limiting working-class aspirations. Subjects which were devised, developed, and established largely to serve the interests of the middle and upper classes came to be seen as the valid definition of secondary curriculum for all. In this sense, today's "natural" curriculum is, in many respects, an arbitrary one, historically defined, that meets the needs of some students but not all (Wake et al. 1979).

♦ Department politics: In secondary schools, subjects are normally taught in departments. These departments have territories to defend and resources to protect. They compete with each other for rooms and cupboards, favourable timetable slots, compulsory curriculum status, and student numbers (Goodson and Ball 1985). They also provide career routes for their members. Subject departments are highly politicized entities. This is one of the reasons why curriculum integration and staff collaboration across departments is so hard to achieve in secondary schools. Not only are identities threatened but interests too.

♦ Student entry into post-secondary institutions: Subject-based qualifications can be "cashed-in" by students for career and further educational opportunities. They are a kind of "cultural capital" (Hargreaves 1989). Universities are powerful gatekeepers of the academic curriculum in secondary schools. To challenge the academic curriculum is therefore seen as a threat by universities as well as by (usually more advantaged) parents who wish their children to go to these universities.

♦ Subject status: The school curriculum is divided into what might be called "high-status" and "low-status" knowledge areas (Young 1971). "High-status" knowledge is academic, theoretical, and relatively easily assessed. It is treated as important within the curriculum and usually has compulsory status, large time allocations, high timetabling priority, and attracts many students. "Low-status" knowledge is non-academic, practical, and much more difficult to assess. It has low importance in the curriculum, lower time allocations, lesser timetabling priority, and attracts fewer students. The difference between high-status and low-status knowledge is chiefly a difference between rigour and relevance.

Teachers, schools, and subject associations are well acquainted with the implicit rules underpinning these differences of subject status. They try to raise the status of their favoured subjects by making them more theoretical, expending more effort assessing them and so forth. Many developments in physical education and family studies can be explained in these terms. The cost of improving a subject's status, though, may be the loss of that very relevance which was the source of its attraction for less academically oriented students. In this way, we can see that the dominance of academic values in schools affects developments not just across subjects, but within them too.

◆ Overcrowded curriculum: Because of the strength of the academic curriculum, and of subject interests within it, whenever schools are required to take on new mandates such as AIDS or drug education, the curriculum is treated like an old, familiar bookcase. New books are continually added but none is taken away (Gray et al. 1983). Additions are made to the existing structure but the structure is not altered to accommodate the changes. The result is overcrowding, clutter, and lack of coherence (Wideen and Pye 1989; Radwanski 1987). Assigning responsibility for AIDS Education to physical education teachers (because theirs is a compulsory subject) rather than to family studies teachers (whose subject is usually optional) can be explained in these terms.

◆ Content-laden curriculum: Secondary school curriculum is designed to "cover" the required subjects and to be sure that the information is provided to students. Consequently, teachers must teach to the intellectual middle of the class (Carroll 1990). The subject-based curriculum tends to create classes which are more content-focused than process-focused, geared to teaching subjects not students. Curriculum documents themselves reflect this emphasis. Pratt (1987) found this to be very much the case in a content analysis of 100 school board curricular guidelines from across Canada,and we have already mentioned the content orientation among science teachers as reported in a survey by the Peel Board of Education (Beaton, J., Both, S., Fine, J., and Hember, D. 1988). There is evidence that strong content orientation may have adverse effects on the quality of instruction. In a study of teachers' sense of efficacy and its relationship to student achievement, Ashton and Webb (1986) found that there was a strong and significant relationship between teachers' low sense of efficacy (their felt capacity to improve student achievement, irrespective of students' backgrounds), their preoccupation with covering content, and their reliance on safe, undemanding instructional methods.

Summary -- Academic Orientation

Academic subjects and the academic orientation of secondary schools are heavily institutionalized both historically and politically. Buttressed by the universities and seen by many parents and communities as "real learning" or "real school" (Metz 1988), they have a pervasive effect on the character of secondary schools as a whole and on their capacity to deliver effective and appropriate services to all their students. .There is nothing inherently wrong with academic learning and academic subjects, and much that is praiseworthy about them, but the extent of their influence on the curriculum appears to have had a number of far-reaching consequences:

- lack of balance, lack of breadth, and lack of coherence in the overall curriculum
- tendency to focus on content more than on instruction, adversely affecting the quality and diversity of instruction
- creation of a curriculum with low relevance which can be unduly difficult and dispiriting for many students
- fragmentation of student experience, preventing sustained engagement with curriculum, teachers, and even peers
- balkanization of secondary schools and departments, making it difficult for

the school to respond as a whole to outside influences and changes, and to establish cross-curricular themes and objectives.

Clearly, curriculum in Ontario is rooted in an academic tradition. Legislation in the last several decades has attempted to loosen the stranglehold that an overcommitment to an academic orientation has had on secondary schooling. Many of the submissions to the Select Committee (Ontario Ministry of Education 1988b) argued for a shift in emphasis -- a shift to make schools more attractive and more responsive to students who may not be served best by an academic, subject-based curriculum. One possible vehicle for creating such a shift is to adopt a core curriculum, as prescribed for Grades 7, 8, and 9 in the Throne Speech of 1989.

CORE CURRICULUM

Criteria for Justifying a Core Curriculum

There is no single justification for a core curriculum. Many arguments have been advanced in its support. Some compete, some are complementary. The particular kinds of core curricula that are developed usually reflect the criteria that are used to justify the creation of the core curriculum. We have derived six criteria from our review of the literature.

- Equality of opportunity: This justification is common in most of the countries of Western Europe (Wake et al. 1979). Premature streaming or premature choice among programs can injure students' later life chances. A common curriculum is seen as a way of leaving options open until as late as possible and thereby helping equalize opportunities among classes, cultures, and sexes (Hargreaves 1982; ILEA 1984; Ontario Ministry of Education 1988b; Adler 1982; Sewall 1983; Boyer 1983)

- Educational quality: One commonly stated aim of school systems is bringing all students up to a basic level of competence by a particular grade (for instance, Grade 10) so that they can function fully as citizens in society (Radwanski 1987; Sullivan 1988; Government of Newfoundland and Labrador 1989). High expectations are usually attached to these minimum standards. In core curricula where this aim is paramount, there tends to be an emphasis on basic skills and academic subjects.

- Transmission and development of the culture: Core curriculum is seen as a vehicle for the transmission and development of common values, knowledge, and other learning considered important in the dominant culture. Although "subcultures" are recognized, the need to develop a unified culture through a common curriculum is seen as important if people are to live together harmoniously and productively. (Barrow 1979; Lawton 1975; Williams 1961). David Hargreaves (1982) relates core curriculum to the development and restoration of community and proposes that community studies form a key part of it. Griffiths (1980) insists that the rejuvenation of national cohesion will be achieved through a common curriculum taught to all students. Many writers (e.g., Barrow 1979) see criticism of the culture and the development of democratic values as central to core curriculum. These rationales for a core curriculum produce curriculum guidelines in which the liberal arts are strongly represented.

- Educational entitlement: A core curriculum promises access to fundamental forms of knowledge that can enable students not only to reach a minimum level of competence, but also to develop fully as "well-rounded" human beings. While this criterion was a powerful component of curriculum reform in Britain in the early 1980s, it was ultimately dropped for safer goals of consistency between schools, basic competency in learning, and focus on academics. Building a core curriculum on the basis of educational entitlement involves recognizing different forms of intelligence (Gardner 1983), forms of knowledge (Hirst 1975), or areas of educational experience. In Britain, Her Majesty's Inspectorate (1983) outlined eight areas of educational experience. These were: the aesthetic and the creative, the linguistic, the physical, the social and political, the ethical, the mathematical, the scientific, and the spiritual. All students, the Inspectorate stated, should have access to these essential areas of experience as part of a balanced education. The Australian Curriculum Development Centre, in seeking to establish the basis for a core curriculum, defined it in terms of nine major domains "through which human experience and understanding have been organized and represented" (Skilbeck 1984). Those were arts and crafts; environmental studies; mathematical skills and reasoning and their applications; social, cultural, and civic studies; health education; scientific and technological ways of learning and their social applications; communication; moral reasoning and action, values, and belief systems; work, leisure, and lifestyle. Such proposals tend to lead to one of two kinds of curricula: those organized around very different categories than at present, perhaps with integrated studies figuring strongly; and those with categories remaining much as they are, with "areas of experience" (defined above) being used to ensure that balance is achieved within and across subject categories.

- Stimulating and recognizing achievement: Developing a curriculum that stimulates, recognizes, and rewards a range of educational achievements, not just academic ones, in order to maximize the possibilities for success and build motivation among the student population, is a common justification for a core curriculum. The assumption here is that student achievement is boosted not by giving less academic students more of what they are poor at, but by nurturing success through building self-esteem. By recognizing and rewarding neglected strengths, it is argued, such core curriculum develops the sticking power that students need to work on areas in which they are weak. In its review of problems of underachievement in secondary schools, the Inner London Education Authority (1984) identified four aspects of achievement:

    - ***Intellectual-Cognitive Achievement*** is concerned with propositional knowledge which is easily written down, remembered, and relatively easily assessed. Knowledge tends to be emphasized more than skill, memorization more than problem-solving. This aspect of achievement is strongly represented in the secondary curriculum and, in many respects, dominates it.

- ***Practical achievement*** is concerned with the practical application of knowledge. It is more oral than written. It is most obviously present in subjects like Industrial Arts but can also be seen in investigative approaches to science. In fact, it can be developed anywhere in the curriculum. Practical achievement is somewhat more difficult to evaluate and thus receives less emphasis in the curriculum than propositional knowledge.
- ***Personal and social achievement*** is concerned with the skills of co-operation, initiative, leadership, and ability to work in groups. While these are the skills that employers value, they receive less emphasis in the curriculum and are considerably harder to assess. As we discussed earlier, there are many personal and social skills which students do not get opportunities to show in the classroom. Neither are these skills assessed or recorded. While much of this aspect of achievement generally goes unstimulated and unrecognized in the conventional classroom, it is revealed in other settings such as co-operative education.
- ***Motivation*** subsumes the others and is perhaps the most interesting. Teachers and schools often assume that motivation is something that students either bring with them to school or do not. You are lucky if you have motivated students to teach, unlucky if you do not. Motivation is usually assessed under the heading of "Effort". Many schools, says the ILEA Committee, pay little attention to motivation. Some actively depress it. Yet the willingness and commitment to learn, says the Committee, is itself an achievement to be developed, something for which the school holds responsibility. Failure to develop achievement in this area will probably lead to failure in the other three.

As with the criterion of educational entitlement, when the criterion of stimulating and recognizing achievement figures strongly in the justification for a common curriculum, a broad curriculum results, rather than one focused on only one area of learning or aspect of achievement.

- Support for instruction, guidance, and welfare: This justification aims to secure coherence among curricular, instructional, and guidance objectives. An example of this approach to core curriculum and its integration with other educational objectives is outlined in the report of a task force of the California League of Middle Schools (Lake 1988b). The report recommended that, within the curriculum, time should be provided to incorporate core courses, exploratory courses, and collaborative and self-contained teaching. According to the task force, a core curriculum would meet the needs of junior high school students in transition.

The "core block" of time within the curriculum would enable educators to smooth transition by providing extended time with one or two teachers; to create a home-base for students and increase student advisery programs; to increase students' sense of belonging, self-esteem and to improve attitudes toward school; to foster teacher collegiality through team teaching and an interdisciplinary approach to instruction; to allow time for increased variety in instructional methods and to provide every student with access to the same learning experiences.

Structure of a Core Curriculum

It is important, when devising a core curriculum, to be clear about the principles one is using and to return to those principles to check that the curriculum fulfils them. While pragmatic and organizational considerations have to be taken into account, it is important that they do not displace the goals which prompted the creation of a particular kind of core curriculum in the first place.

What kinds of core curricula are possible? What principles do they realize? How best do they meet the needs of the Transition Years? According to Skilbeck (1984), there are three distinct ways of interpreting and organizing a core curriculum.
It may be:

- a set of required subjects or subject matter embodied within a centrally determined syllabus to be taught to all students
- a set of required subjects or subject matter determined by a school with courses and activities required for all students
- a broadly outlined statement of required learning for all students, defined by both central and local bodies and interpreted by schools.

For Skilbeck, the main difference among these ways of organizing a curriculum is the amount of local control in the decision-making process. Skilbeck's second definition appears not very workable in a provincial context, particularly in view of guarantees for every school that a core curriculum would meet the goals of educational entitlement and development of the culture. Leaving the organization of core curriculum entirely to individual schools would lead to inconsistency in the achievement of provincial curricular objectives.

Skilbeck's other two definitions are more workable in the Ontario context. In reviewing, evaluating, and developing these definitions, we will take into account how well each meets the criteria for a core curriculum we outlined earlier. To recap, these criteria are:

- equality of opportunity
- educational quality
- common culture and community
- educational entitlement
- achievement and motivation
- integration

◆ Core curriculum as a set of required subjects or subject matter contains two sub-definitions. The first is a set of "required subjects". This type of core curriculum was put forward in both Newfoundland and Labrador and in Great Britain.

A task force appointed by the Government of Newfoundland and Labrador (1989) concluded that low expectations of students must be reversed and that streamed programs which restrict career opportunities and further education are not acceptable. Many of the recommendations of the task force were based on the following principles:

- Teaching basic academic subjects (including math and science) to all students should be the highest priority of schools.
- High school programs should be constructed to maximize student participation in basic academic courses, in order to give students greater access to post-secondary education.
- High school programs should ensure that most students can achieve success in basic academic courses.
- High participation rates and high levels of performance are interrelated goals. However, high performance expectations should not result in high dropout rates.
- High school programs should prepare students for post-secondary education by encouraging them to choose programs and courses which will give them access to post-secondary institutions.

The British Education Reform Act (1988) outlined a core curriculum organized around existing subject categories which was implemented as the National Curriculum. Made up of a core of mathematics, English, and science, with the additional foundation subjects of modern languages, geography, history, creative arts, physical education, and technology, its academic emphasis is unambiguous. However, its designers claim that it is not wholly knowledge-based and that it also deals with attitudes, skills, and experiences. In addition, they claim that it encourages cross-curricular work in the development of skills, personal and social development, and the like. Nonetheless, in terms of time allocations, conventional subjects predominate (Hargreaves 1989). Broadly speaking, these kinds of subject-based curricula are what Radwanski (1987) recommended for Ontario.

Common courses are seen to enhance equality of opportunity. The setting of national benchmarks within each subject at ages 7, 11, and 14 is directed towards achieving the goal of educational quality. While the development of culture and community are achievable goals, they are more difficult to attain within existing fragmented subject categories.

The notion of a subject-based common curriculum runs counter to several other criteria for a core curriculum, though. Its lack of breadth prevents it from meeting the goal of educational entitlement. Neither does it cover, in equal measure, the different aspects of achievement. The balkanized character of high schools that this subject-centred approach allows to persist and even prosper, also presents a serious threat to the integration of curriculum, guidance, and instruction in programs for Transition Years students.

The approach advocated in Newfoundland and Labrador and in Great Britain has further disadvantages. These include a content focus that is already strong within subject communities, a restriction of opportunities for teacher development where there is little curriculum left for teachers to develop, and student demotivation. If students lose motivation in spending even more time on areas in which they are weak, adverse effects on student equality will result.

The second subdefinition of core curriculum is prescribed "subject matter", rather than prescribed subjects. One example of this type of core curriculum is outlined in the British Columbia Royal Commission Report on Education (Sullivan 1988) and further developed in the policy document Year 2000: A Curriculum and Assessment Framework for the Future (Government of British Columbia 1989).

The Commission recommended that the Ministry of Education develop a "common curriculum" for all students in Grades 1 to 10 and that it include humanities, fine arts, sciences, and practical arts (Sullivan 1988). Within these subject groups, English, social studies, and French are to promote the development of language skills and an understanding of human relationships. Music, visual arts, theatre, and dance are to provide alternative modes of thinking and encourage creativity. The sciences (mathematics, general science, and technology) and the practical arts (physical education, industrial arts, lifespan education, and home economics), along with the humanities and fine arts, are to develop academic and life skills while fostering individual creativity and aptitudes. A similar core curriculum has been implemented in secondary schools in Utah. Although subject areas are not yet finalized, the courses include communication, mathematics, science, social studies, arts, technology, vocational education, and lifestyle (Utah State Office of Education 1985).

The British Columbia Royal Commission stressed that moral education goes on in schools as they impart values, standards of conduct, and moral beliefs upon which our society is based. These underlying principles, it stated, should be stressed in both curricular and extracurricular activities.

It is hoped that a common curriculum will integrate subject areas, since all subject areas develop students' abilities and skills. The Commission recommended that, throughout the common curriculum, an interdisciplinary teaching approach be used and that, at any given grade level, teachers instruct in at least two different subject areas. This would reduce the practice of teachers being assigned to only one subject area. In addition, to satisfy individual students' interests, needs, and rates of development, it was recommended that students have access to cross-grade and/or multigrade classroom groups.

A common curriculum, it was asserted, would create a supportive environment for students. The Royal Commission maintained that students would benefit from a sense of identification with a caring and empathetic teacher in the school. Thus, the Commission recommended that a teacher, adviser, or mentor be available to each student in each year of the common curriculum.

Extracurricular activities were identified as a significant component of the education process, as a supplement to students' regular curricular experiences. This component of education is not, however, equally available to all students. The Commission, therefore, recommended that adequate funding for extracurricular activities be provided to guarantee all students equal access.

To allow flexibility and to provide opportunities for locally developed programs, the Commission recommended that the common curriculum take up no more than 80% of teaching time. Upon completion of the common curriculum for Grades 1 to 10, students would receive an official certificate permitting them entry into an extra two years of secondary education.

Based on the findings of the Commission, the Government of British Columbia (1989) released a report entitled *Year 2000: A Curriculum and Assessment Framework for the Future*, which demonstrated its commitment to implementing the proposed curriculum changes. This report promotes a learner-focused curriculum which provides for continuous progress and self-direction, and, at the same time, takes into consideration variations in individual development (Government of British Columbia 1989). The *Year 2000* report supports the concept of a common curriculum based on the humanities, sciences, practical arts, and fine arts which stresses student learning outcomes and experiences rather than learning activities.

The B.C. proposal for a common curriculum is ambitious. It makes the same promises of *equality of opportunity* and *educational quality* as its subject-based counterparts in Newfoundland and Labrador and Great Britain. Its broad thematic structure makes the goals of *community* and *integration* easier to achieve and encourages curricular integration. It is a bold strategy promising fundamental change and significant improvement. However, at the Transition Years stage, the proposal has three sources of weakness.

First is the omission, in the Transition Years, of essential areas of educational experience, especially those that deal with the practical arts. This threatens the principle of educational entitlement.

Second is the principle of integration. While we have outlined the drawbacks of subject specialization, it should be acknowledged that integration can be problematic as well. Integrated studies can degenerate into theme work and topics which contain no real challenge and involve students copying copiously from resource books (Bantock 1980). Effective integration is secured according to agreed-upon high-level principles which bring different subject areas together, as is done, for instance, in university Linguistics departments (Bernstein 1971). Discussion about, agreement upon, and planning around key skills, concepts, and attitudes at the school and district level is exceptionally important in achieving effective integrated studies.

Third is the danger of overspecifying content. If content of curriculum is closely prescribed, programs may become content-driven and inflexible. The quality of instruction may suffer, as may opportunities for teacher development. If anything, we might do better to begin "unwriting" the details of our curriculum guidelines instead of trying to specify them still more closely!

◆ Core curriculum as a broad outline defined by both central and local bodies and interpreted by schools: This is the other major way of defining a core curriculum. Such a curriculum might possess the following characteristics:

- It would be defined not in terms of subject knowledge, courses of study, or detailed content, but in terms of broad areas of experience and human understanding of the sort we described earlier (Her Majesty's Inspectorate 1983; Skilbeck 1984).

- Defining a core curriculum in terms of broad areas of experience would meet most, if not all, of the criteria for establishing such a curriculum. Compared with subject-based models, models organized around areas of experience would address two criteria particularly effectively -- students' entitlement to a broad and balanced range of educational experiences; and their access to expanded opportunities for educational achievement.
- A core curriculum defined in broad terms would leave sufficient scope for, and flexibility in curriculum development and teacher development at the level of the school. School-based curriculum development and teacher development are vital to the success of curriculum and assessment reform (Hargreaves 1989; Skilbeck 1984; Rudduck, in press). Teacher development, we have seen, in the form of close working relationships with colleagues, builds collective commitment to norms of continuous improvement which make teachers responsive to, and interested in change (Little and Bird 1984). Yet teacher development is inseparable from curriculum development (Stenhouse 1980). Teachers are unlikely to collaborate unless there is something substantial for them to collaborate on; unless there are significant things within the curriculum of which they can take ownership. A core curriculum leaving considerable latitude in curricular judgements at school level is necessary for these important developments to take place.
- Leaving curriculum development entirely to the discretion of the school can create indefensible omissions and inconsistencies. Yet we have seen that close prescription of content through written curriculum guidelines can create a culture of dependency among teachers, leading to a preoccupation with coverage. How then can teachers and schools be helped to meet broadly defined curriculum guidelines in their own particular way? Hargreaves (1989) suggests that systems of inspection, support, and review, administered at the school board level, could ensure that schools sincerely try to meet board requirements and the core curriculum. Such systems can help teachers, through the process of school-based curriculum development, to address the broad guidelines in their

own particular way. School board consultants and superintendents might usefully undertake this role, diverting some of their time and energy from writing those detailed curriculum guidelines which currently appear to restrict many of the opportunities for curriculum development in our schools.

Summary -- Core Curriculum

A core curriculum can take many forms and be developed according to many criteria. From the point of view of helping students adapt more positively and more effectively in the long run to secondary school, it is important that the curriculum is broad and that it recognizes a wide range of educational achievements. This suggests a curriculum organized not around specific subjects and subject matter, but around broad areas of educational experience. It also suggests a different role for school board consultants in working closely with small groups of schools, to help them meet these broad guidelines, and ensure they are endeavouring to do so sincerely.

A core curriculum of this kind is likely to avert and even counter the demotivating effects of the present subject-based academic curriculum. It is also likely to leave schools and teachers sufficient scope and flexibility to develop the substance of their own curricula: creating a culture of confident teachers who are committed to change and improvement. This kind of broadly defined, yet locally developed, core curriculum offers an important chance of superseding the traditional alternatives of centrally imposed and school-based models of curriculum development -- models which have hitherto enjoyed little success in breaking the stronghold of academic influence on the secondary school curriculum.

INSTRUCTIONAL STRATEGIES

Curriculum is not just a set of programs and guidelines concerning content to be covered or learning outcomes to be achieved. Ultimately, the only curriculum that counts is the curriculum experienced by the learner -- the curriculum-in-use. This brings us to the domain of instruction, a domain in which curriculum is not only delivered but also developed, defined, and redefined at the level of the classroom.

As we and many other writers have mentioned, changing grouping patterns, school organization, or curriculum is unlikely to have any major positive impact on classrooms or on students unless teachers alter the ways in which they teach (Leithwood, Lawton, and Hargreaves 1988; Slavin 1987b; Epstein 1990). Providing the kind of schooling that meets the needs of adolescents requires schools and teachers not to become expert in any one, single instructional strategy, but to expand and enhance their repertoire; to provide learning opportunities that are relevant; to move beyond merely academic approaches; and to expose their students to a wide range of educational alternatives. In this section, we describe several instructional approaches that have been suggested as particularly appropriate for the Transition Years. This is not to suggest that there are not many others. Transition Years' schooling should, in fact, draw the best from all models of instruction to provide a flexible, fluid, responsive educational environment, drawing on such instructional practices and approaches as team teaching, interdisciplinary mini-courses, small group co-operative learning, learning styles, and experiential career education, as well as a myriad of others.

Team Teaching

Team teaching is a popular concept in the literature on middle-level education designed to facilitate sharing, break down departmental barriers, and promote continuity. It involves teachers from two or more subject areas planning, preparing, and evaluating lessons jointly to accomplish common learning goals. Team teaching brings together teachers with varying knowledge bases, skills, and abilities in order to capitalize on individual strengths and correct for individual weaknesses (Cotton 1982).

The literature claims six major advantages for team teaching:

- it capitalizes on the individual strengths of teachers;
- it fosters creativity through close working relationships among teachers;
- it encourages personalized observation and communication among teachers;
- it facilitates individualized instruction;
- through teacher communication, it provides better sequencing and pacing;
- it builds program continuity, thus reducing the effects of teacher turnover (Cotton 1982; NYSBA 1987).

Administrators and teachers usually identify three reasons for adopting the team teaching approach:

- the need to use equipment, resources, and facilities more effectively
- the need to use the skills and talents of teachers more effectively
- the need for more effective instruction (Cotton 1982).

In her review of research on the effectiveness of team teaching as compared with traditional one-teacher, one-classroom arrangements, Cotton found that the two formats are equally effective in enhancing student achievement at the intermediate level. With regard to affective outcomes, such as self-concept and school attitudes, however, team teaching is at least slightly favoured by the majority of studies and significantly favoured by some. She concluded that, since the teaming arrangement is just as effective as traditional methods in promoting achievement and more beneficial for affective development, it is a viable instructional strategy for middle-school students (Cotton 1982).

An Alberta study of team teaching in the seventh grade of junior high schools yielded similar results. Pairs of teachers were assigned to two classes for a homeroom period plus four academic core courses -- language arts, social science, mathematics, and science. Evaluative research found that students in team-taught classes showed better attitudes towards school, schooling, and their classes than did the control group (which was not in the team-teaching situation). Improved attitude towards school seemed to stem from improved relationships with teachers. While in the total curriculum, team-taught students showed higher achievement gains than the control group, in the team-teaching situation average and better students did less well in language arts. The study recommended that team teaching be retained and that efforts be made to improve instruction in language arts for average and better students (Sigurdson 1982).

Evaluations of team teaching in the literature are not entirely positive. A 1972 study by Odetola et al. (1972) failed to support notions that teacher teams in middle schools enhance student identification with school or reduce feelings of powerlessness among students any more than do typical junior high school programs.

Team teaching is a complex phenomenon, the effectiveness of which appears to depend on many variables. Joint action among teachers is a function of teachers' perceptions of their interdependence and of the presence of opportunities for joint action. Teachers are more likely to co-operate to solve problems when they feel their problems are shared and when barriers to common action are reduced (Little and Bird 1984; Nias et al. 1989); both conditions that require considerable within-school communication and planning.

Interdisciplinary Courses and Mini-Options

Another instructional approach, one that is often allied with team teaching, comes in the form of interdisciplinary courses. These are courses which unite two or more subject areas under a unifying theme, involve a variety of skills, and may be taught by a team of teachers from different subject areas. These kinds of courses are highly consistent with the move towards interdisciplinary core curriculum because teachers use common content and reinforce a variety of cross-curricular skills. A position paper by the

New York State School Boards Association recommends that school programs be organized in combinations of small and large blocks of time to accommodate interdisciplinary approaches to teaching (NYSBA 1987). This same suggestion was made by Carroll (1990), in his description of the Copernican plan which proposes to reorganize secondary school scheduling to accommodate better instructional practices.

Osborne describes a concept related to interdisciplinary courses: mini-options. These are elective courses lasting for a limited time (from two or three weeks to a term) that are designed to enrich the prescribed curriculum. Mini-options may cover special topics within a subject area or be interdisciplinary. They need not and should not be exclusively academic. Instead, they can be used to allow students to explore new areas of interest, including hobbies and physical activities, and can provide many opportunities for independent study. Osborne (1984) suggests the following criteria for the design and selection of mini-options:

- students should be encouraged to initiate, organize, plan, and conduct the mini-courses;
- teachers should have freedom in proposing and planning the activities they guide;
- student participation should be voluntary and marks should not be given by teachers;
- grouping in courses should be heterogeneous.

Co-operative Learning

Small-group co-operative learning is perhaps mentioned most often as an appropriate instructional strategy to use in the Transition Years, especially with heterogeneous groups. Co-operative learning[1] involves students working in small, heterogeneous groups of four to six, with recognition, rewards, and, occasionally, marks based on the academic performance of the group (Slavin 1983a). Robert Slavin has done considerable research on co-operative learning in the Transition Years. Slavin (1980) describes some of the student activities which can comprise co-operative learning:

---

[1] "Co-operative learning" is not the same as "co-operative education", which refers to students combining work placements in the community with academic education.

- students working on problems in pairs
- students taking turns quizzing each other
- students discussing problems as a group
- students playing academic games in a tournament
- pairs of students mastering sections of a lesson, then instructing group-mates in their areas of new expertise.

Evaluative studies have found that co-operative learning increases academic achievement, improves behaviour and attitudes towards class, raises self-esteem, improves attendances, and improves motivation. Slavin's (1987b) review of research into the effectiveness of co-operative learning found that students benefit both academically and socially. With regard to social benefits, Slavin found that co-operative learning improves interracial relations in the classroom and increases interracial friendships (Slavin 1985). He also found that, where academically handicapped students have been integrated into regular classes, co-operative techniques used in teaching mathematics improve social acceptance, academic achievement and self-esteem of the handicapped students (Slavin 1983a).

Research evidence shows that not all co-operative learning strategies are equally effective, though most positively affect self-esteem, intergroup relations, and the ability to work with others. One interesting finding from Slavin's research is that achievement gains are enhanced with co-operative learning when the exercise includes both group goals and goals for individual accountability within the group (Slavin 1988). When groups are rewarded for the learning of individuals within the group, students are motivated to provide high-quality assistance to their group-mates (Slavin 1987a). By contrast, high individual accountability has been shown not to have significant positive effects on learning when compared with co-operative reward conditions (Slavin and Tanner 1979).

Small-group co-operative learning has several additional advantages in that it is usually inexpensive and easy to implement; it requires minimal teacher training; and by encouraging positive social and academic interaction among peers (Lyman and Foyle 1989) it is particularly suited to meeting preadolescents' needs for peer socializing and-peer-acceptance.

Learning Styles

The term "learning styles" is a generic one representing a wide variety of approaches and models. Included in the literature about learning styles are references to such things as cognitive styles (Messick 1969), mediation abilities (Gregorc 1979), conceptual styles (Hart 1979), learning types (McCarthy 1980), learning, style elements (Dunn and Dunn 1982), and differentiated instruction (Butler 1984). Although critical reviews of learning-styles programs are scarce, such programs are attractive because Bernice McCarthy, the creator of the 4MAT Learning Styles program maintains, regardless of particular learning strengths and weaknesses, all students should benefit by experiencing a variety of teaching approaches.

Experiential Career Education

The literature provides a number of examples of innovative career education curricula which engage students in active involvement with the world outside school. Co-operative-education programs are becoming an important part of schooling, not just for senior students in advanced academic courses but for all students in the Intermediate and Senior Divisions, as a vehicle for not only developing essential skills and attitudes but also for becoming familiar with the wide range of career alternatives. A few are profiled here while more are contained in the separately published annotated bibliography.

Greenberg and Hunter (1982) describe a vocational program which has four components:

- infusion of work concepts into the traditional curriculum
- classroom-based experiential learning, including the use of community resource people and peer-teaching about personal work roles
- community-based learning, including small-group projects, job shadowing (in which a student spends half a day with a worker at a job of the student's choice)
- community internships.

The Maine State Office of Career Education designed a career-education program that involves administrators, staff, and students. Administrators prepare needs assessments, create career-education plans, set up community action councils, run public relations programs, and work with government-funded training agencies to provide work placements for students. Staff attend in-service training programs, are involved in planning and setting up career resource centres, and use videos, other media, and labour-market information in classroom career education. Students participate in career-awareness fairs, mini-workshops, independent study, and take part in community-based activities such as job shadowing and job placement (Gould 1981).

The Wayne Township Schools in New Jersey sponsored a project to introduce middle-grade students to high-technology vocations (Wayne Township Schools 1985). The project involved:

- student visits to workplaces accompanied by their teachers
- exploratory activities in areas of vocational/career training
- links with community employers
- in-service training for teachers about high-technology vocations
- parental job shadowing
- computer-literacy training.

OSIS (Ontario Ministry of Education 1984, revised 1989) encourages schools to offer a variety of experiential programs including co-operative education where students are placed in supervised training programs in the community for an extended time period; work experience where students spend a limited time in the workplace as part of a course; and linkage programs with the Ministry of Skills Development which lead to apprenticeships.

Summary -- Instructional Practices

The quality of education in the Transition Years ultimately depends on what individuals and groups of students experience in their schooling. It is unlikely that deep and lasting improvement in the quality of this experience will occur unless school systems, teachers, parents, and the general public make the necessary adjustments to allow schools to embrace a wider range of instructional practices. If we are to include in that range the alternative instructional practices we have described, teachers must be self-confident and secure, schools must be flexible, administrators must be supportive, and parents and the general public must be knowledgeable and be prepared to become partners in the educational enterprise.

CONCLUSIONS AND IMPLICATIONS

This chapter has reviewed the impact of patterns of curriculum and instruction on the capacity of schools to meet the needs of young people in the Transition Years.

Secondary schools, we noted, are schools where subjects, their identities, their interests, and their departmental organization prevail. School subjects are not just intellectual communities. They are social and political communities too. Most current school subjects have their roots in turn-of-the-century categories which were defined and designed to meet the needs of secondary education for an academic elite. They persist partly for reasons of historical inertia, but also because of the ways secondary school teachers' identities and allegiances are formed through them, because of departmental politics which protect and sustain them, and because of the pressures of universities and other influential groups whose interests are served by preserving them. Subjects have become central to the organization of secondary schooling. They form one of the most sacred parts of its culture.

The subject structure of secondary schooling may have some appropriateness for the Specialization Years -- although we should note here that, as a collection, secondary chool subjects are less bold, diverse, and innovative than the range of subjects offered in higher education.

The appropriateness of traditional subject structures for students in the Transition Years is more questionable. Conventional subject structures skew the curriculum towards the academics, in a way that can be demotivating for many less able students, who find such work unnecessarily difficult and remote from their experiences. They also tend to balkanize secondary schools into separate and sometimes competing departments. This can create serious obstacles to developing shared educational goals and establishing consistency in instruction and expectations for students. Subject-based secondary schooling can also fragment time and space for students in school, undermining their security and leaving them with little sense of "home". For these reasons, a conventional subject-divided curriculum seems poorly suited to the needs of early adolescence.

Developing a core curriculum has been seen as one way of addressing this problem in the Transition Years. But views differ regarding why a core curriculum should be established and about the criteria which should be used to define any particular version of it. From the point of view of the Transition Years, three criteria are particularly important. First, a core curriculum can give students access to a broad and balanced curriculum, creating more possibilites for relevance, imagination, and challenge in their learning. Second, a core curriculum can widen our definitions of achievement and increase students' opportunities to succeed. Third, a core curriculum can allow greater flexibility in timetabling and teaching arrangements which, through the establishment of teaching teams dealing with "core blocks", can increase collegiality and consistency among teachers, improve the quality of guidance and care for students, and allow teachers to experiment with new patterns of instruction with smaller groups or over longer time-frames.

A core curriculum organized around conventional school subjects is unlikely to meet these key criteria for the Transition Years. Such a curriculum will only reinforce the priorities of the academics and of intellectual achievement in secondary schools. Relevance will be harder to establish, motivation more difficult to develop. Students' experience will tend to remain fragmented as balkanization in secondary schools persists. Curriculum reform for the Transition Years, it seems, must therefore address the most sacred norm of secondary schooling -- its organization around school subjects.

Varieties of core curriculum were reviewed that sought to overcome these difficulties. These curricula were organized around broad areas of human experience and understanding to which all students had an entitlement. They were broad and balanced, they defined achievement widely, and they allowed and encouraged the development of curriculum integration. These curricula, it was suggested, are best defined firmly but broadly -- setting clear directions and expectations but leaving considerable scope for local development, especially at school level. Less attention, it was suggested, should be paid to writing detailed, content-filled guidelines at board level, and more to developing systems of support and review to help ensure that schools meet the broad criteria in their own ways. The scope offered for school-based curriculum development within the broad guidelines would respect the discretionary judgement that is at the heart of teacher professionalism, allow teachers the flexibility to respond effectively to their students' needs, and offer real opportunities for collaboration and collegiality among the teaching force.

We went on to observe that curriculum is more than a program of study or a set of paper intentions. Ultimately, the curriculum that really matters is the curriculum experienced by the learner. This brought us to instruction. Several patterns of instruction that seem particularly apt for the Transition Years were described and evaluated. Co-operative learning, in particular, was found to possess some of the strongest potential for meeting early adolescents' needs for learning and social development. Yet in highlighting patterns of instruction that appear to yield positive outcomes for learning and student growth, we want to conclude by cautioning against rapid and wholesale adoption of such methods. We issue this caution for the following reasons:

- Instructional strategies are a tempting focus for change. In some ways, this is appropriate, for it is through these strategies and the response to them that students experience the curriculum. But department heads, principals, and school board administrators are sometimes inclined to concentrate their change efforts too heavily on instruction at the individual-teacher level, to the exclusion of other areas of reform. Although a sensitive and difficult task, improving instruction is an attractive proposition for reformers. The norms it threatens are less sacred than those threatened by changes in curriculum or school subjects. Yet in many respects it is subjects and subject organization that support traditional patterns of instruction and make instruction so difficult to change. The working definitions of learning in many subjects support traditional patterns of instruction. And the fragmentation of the timetable that tends to come with a subject-based curriculum restricts opportunities for sustained project or theme work that would allow greater flexibility in teaching methods. The implication is that changes in instruction cannot be undertaken effectively without parallel changes in other aspects of secondary schooling.

Changes in instruction, such as implementing co-operative learning, are often initiated through intensive programs of training directed at the skills and attitudes of teachers. In-service training programs, the use of school board co-ordinators, and the development of peer-coaching strategies to implement new methods are some of the approaches taken to such training. Yet, these training approaches presume that teachers persist with traditional patterns of instruction because they lack knowledge of alternatives, do not know how to use them, or are unwilling to try them (Hargreaves 1989; Hargreaves and Dawe 1990). We have seen in this chapter, however, that traditional patterns of instruction are not just a matter of individual-teacher preference. They are supported by other "sacred" aspects of secondary schooling -- in particular, its organization around academic subjects and, as we shall see, its continuing use of traditional patterns of assessment.

Unless these more "sacred" aspects of secondary schooling are addressed, we would predict, on the basis of the evidence, that efforts to improve instruction by itself will be ineffective. At best, isolated efforts to implement new methods like co-operative learning will have a short-term impact, will take most effectively among those who are already committed and enthusiastic, and will be adopted in a few "sympathetic" subjects only. At worst, they will be an expensive diversion of scarce resources which unwisely approach change and improvement as something rooted only in teachers' skills and attitudes, rather than in the "sacred" structures in which teachers work (Fullan and Hargreaves, in press).

- When the value of new instructional strategies like co-operative learning is discovered, administrators and other change agents are often inclined to advocate them and implement them too enthusiastically, too quickly, and too dogmatically.

Research evidence (e.g., Galton, Simon, and Croll 1980; Mortimore et al. 1988) suggests that the most effective approaches to instruction are those where teachers draw on a wide repertoire of strategies which they apply flexibly to different learning situations. Changing teachers and their patterns of instruction is not like giving them frontal lobotomies. Most teachers do not change their entire approach to instruction after many years experience because of a few in-services or coaching in new instructional techniques. Nor should we expect them to change in that way. The use of a wide, flexible repertoire is more effective than overkill in a single strategy. Evidence from Ontario suggests that overzealously insisting that reluctant teachers convert wholesale to new instructional strategies can make them less, not more effective (Hargreaves and Wignall 1989).

Moreover, research on teachers in midcareer suggests that, having already seen several major innovations come and go in their careers, many experienced teachers are sensibly reluctant to give their all one more time, and change their whole teaching approach around again (Huberman, in press). But what these teachers are willing to do, given time and flexibility, is "tinker around" with new methods and expand their repertoire a little.

In terms of the strategies most likely to be effective, and of the realities of teachers' careers, therefore, evidence suggests that it is advisable to encourage teachers to widen their instructional repertoires and try out new methods. What is not advisable is advocating, still less insisting, that they swing to completely different styles of instruction, and become very different kinds of teachers.

- ◆ A final and related caution about implementing new patterns of instruction is that they should not be implemented too quickly. Teachers, we have argued, are not just collections of skills and techniques. Changing teachers in any deep and lasting way cannot be achieved with a few quick in-services or even intensive programs of peer-coaching. Teachers teach the way they do, not just because of the skills they have learned, but also because of the structures in which they work and because of the kinds of people they have become. Changing teachers involves changing people, and changing people is slow work (Goodson, in press; Fullan and Hargreaves, in press). This means that new instructional strategies should be implemented at a pace and with sufficient flexibility to allow teachers to adapt to them and try them out at their own comfort level.

It is unfair, unrealistic, and ineffective to expect or insist that teachers change their teaching dramatically, in a short space of time. But it is fair, realistic, and likely to prove more effective if we expect teachers to commit themselves to continuous improvement as a community of colleagues, and to experiment with new instructional strategies as part of that commitment. When seeking to improve instruction, we often commit ourselves enthusiastically to conversion, when extension would be a more practical and productive goal.

CHAPTER FIVE

ASSESSMENT AND EVALUATION

Assessment is the tail that wags the curriculum dog (Hargreaves 1989). Often, we view assessment as something that follows learning, that comes after instruction (Burgess and Adams 1985). However, as Broadfoot (1979) argues, assessment commonly has a "backwash" effect on the curriculum and on the processes of teaching and learning that go on within it. Assessment therefore operationalizes our educational goals as much as it reflects them (Murphy and Torrance 1988). Any changes in educational assessment should, in this sense, be planned in accordance with changes being proposed for curriculum. Curriculum and assessment reform should be undertaken together, with planned coherence. Otherwise assessment reform will simply shape the curriculum by default (Hargreaves 1989).

If our educational goals promote a broad range of outcomes and recognize a wide variety of educational achievements, these goals should be reflected in an equally broad assessment policy (Leithwood et al. 1988). Given the power of assessment to shape curriculum, teaching, and learning, imbalances in assessment will likely create imbalances in curriculum, teaching, and learning too.

Some types of assessment like provincial examinations and standardized testing are commonly criticized for their negative effects on curriculum, teaching, and learning (e.g., D. Hargreaves 1982). This has led some to advocate abolition of particular assessment strategies which are seen to have these effects (e.g., Whitty 1985). But assessment overall cannot be abolished. It is a constitutive part of teaching. Teachers assess all the time. They monitor the progress and response of their students continually in the ongoing flow of classroom events. Scanning for facial expressions, checking students' seatwork, asking questions to test understanding -- teachers undertake this kind of informal assessment as a routine part of their job (Jackson 1988). Without it, they would scarcely be teaching at all. Assessment cannot be abolished, but it can be reformed. In view of our earlier argument, it seems sensible to suggest that the driving force behind assessment reform should be the goal of meeting our curriculum and instructional objectives more effectively.

Assessment fulfils many purposes, including accountability, certification, diagnosis, and student motivation. Where any one assessment strategy is concerned (for example, standardized tests or portfolios), not all these purposes can usually be met (Hargreaves 1989; Broadfoot 1979). Some assessment strategies like portfolios that are useful in stimulating student motivation are poor as devices to meet the demands of public accountability. Equally, some strategies, like provincial examinations that provide accessible and concise information to external publics, are not particularly helpful as tools to aid diagnosis of individual-student problems. We are more likely to meet the range of assessment purposes, therefore, by using a wide range of assessment strategies. Developing and using a broad assessment repertoire increases our capacity to capture the range of assessment purposes. The corollary of this is that if we invest in a narrow range of assessment strategies we will fulfil only some of our assessment purposes at the expense of the rest.

Developing and deploying a wide range of assessment strategies is commonly criticized as taking up excessive amounts of teacher time (Stiggins and Bridgeford 1985; Broadfoot et al. 1988). The burden of additional assessment demands on the teacher can seem particularly great where assessment tasks, such as paper-and-pencil tests, are administered separately from the rest of the curriculum. Yet we have already seen that teachers assess their students informally all the time as an integral part of their teaching. If a wider range of assessment strategies are to be developed and deployed, and if these are not to make excessive demands on teacher time, these new assessment strategies should become part of the learning that goes on in the classroom, not something administered or marked like stacks of exercise books, when the learning is over. Integrating new assessment strategies into curriculum and learning is one of the greatest practical and conceptual leaps to be made in assessment reform.

These are some of the basic points with which we commence our review of educational assessment:

- that assessment reform and curriculum reform are closely interrelated and should be undertaken together;
- that broad curriculum goals should be reflected in broad assessment goals;
- that educational assessment cannot be abolished -- it can only be reformed;
- that educational assessment fulfils diverse purposes which cannot be properly captured in any single assessment strategy -- only in a wide range of assessment strategies;
- that assessment should be an integral part of the learning process, not something administered once the learning is over.

We will clarify and amplify these points in the remainder of this chapter by clarifying the nature of educational assessment, outlining its main purposes, and describing the specific types of assessment that teachers can and do use in their own classrooms. We will then examine traditional patterns of assessment and their implications for teaching and learning. Finally we will discuss a range of alternative assessment strategies along with some possibilities and problems in their application.

Definition of Assessment

Assessment, according to Bloom (1970), is one of three aspects of the testing enterprise, the other two being measurement and evaluation. Bloom defined assessment as an "attempt to assess the characteristics of individuals in relation to a particular environment, task, or criterion situation". Satterly (1981) defined assessment more widely as "a term that includes all the processes and products which describe students' learning" and Wood and Power (1984) expressed the need to separate the term "assessment" from "measurement". Student evaluation, on the other hand, is defined as the process of assessing student progress towards stated educational objectives and includes making value judgements (Stennett 1987). In this chapter, assessment will be defined as the processes used to describe and discriminate what students learn at school.

It is reasonable for those involved in the learning process to want to understand its outcomes (Murphy and Torrance 1988). Therefore, by definition, good assessment is not only an essential part of teaching and learning, but is also inseparable from teaching itself (Shipman 1983).

Assessment can be differentiated in terms of what teachers assess -- the process of work (how the student sets about collecting, organizing, and interpreting the information), or the product (the presentation of the ideas and the quality and quantity of the work). Usually, precedence is given to the assessment of finished products, since assessment is commonly viewed as an attempt to quantify outputs, within a product-oriented view of learning (Shipman 1983).

Depending on when assessment takes place, it can be diagnostic, formative, or summative. Diagnostic assessment is often conducted at the beginning of the school year, or term of study, to identify whether or not a student is having difficulties, and thus to make decisions about placement or program modifications (Board of Education for the City of Etobicoke 1985). Much of this type of assessment is done informally and continually. Informal assessment takes place as the teacher interacts with students in the classroom, interprets students' answers and responds to them by modifying his/her teaching style, adapting the topic or changing the curriculum.

The terms formative and summative assessment are used respectively, to distinguish between continuous assessment throughout the course of instruction, with its prime purpose of improving instruction and learning, and assessment that occurs at the end of the unit and aims at assessing the student to produce evidence of what has been achieved. As with the process-product distinction, the emphasis is on how far assessment will help the teacher identify the learners' problems and provide immediate support, as compared to describing final performance (Scriven 1978).

Finally, assessment can be differentiated in terms of its point of reference. Criterion-referenced assessment records students' attainment of specific curricular goals individually. It matches students against a standard. The advantage of this method is that it enables teachers to identify by how much a student has exceeded or fallen short of the predetermined level of performance so that appropriate help can be offered (Rowntree 1980). When the comparison is made against peers and not specific standards, the assessment is called norm-referenced. Broadfoot (1979) argues that the predominance of norm-referenced assessment, which is of little help to teachers in improving their teaching, reflects the competitiveness which characterizes our society.

In addition to these two widely discussed reference points of assessment, there is also a third, less widely discussed one -- ipsative assessment. Derived from the Latin ipse (meaning "self"), this pattern of assessment is one where one's performance and achievements are measured neither against any norm or average, nor against pre-set criteria, but against one's own past performances and achievements. A good deal of marking of students' work in elementary school takes this form. "Low-ability" students may be credited with high marks or high grades or praising comments ("because it's good for them") even though the overall standard may be poorer than that produced by "able students". One of the problems in transferring to secondary school is the puzzling dip that occurs in some students grades when they may move from being assessed by ipsative referencing in elementary school, to norm- or criteria-based referencing in secondary school (ILEA 1984). This common problem points to the importance of establishing consistency in assessment practice according to the point of reference throughout the Transition Years, especially as students move from one institution to another. To sum up:

- assessment has been defined as the processes used to describe and discriminate what students learn at school;
- assessment can assess the process of work, or its product;
- assessment can be diagnostic, formative, or summative in nature;
- assessment can be criterion-referenced, norm-referenced, or ipsative in character;
- because inconsistency in assessment practice can lead to confusion and disappointment in the Transition Years as students transfer between schools, establishing clarity and consistency in the point of reference for assessment, is an important priority.

Purposes of Assessment

Educational assessment serves a number of different purposes, four of which are widely discussed in the literature: accountability, certification, diagnosis, motivation.

- Accountability: In the eyes of the public, assessment can legitimize the existence of a given educational system and communicate to society how far its expectations for schooling are being met. Since taxpayers invest money in education, they want to make sure that their money is well spent. As the proportion of taxpayers who do not themselves currently have children in school rises, so too does the demand for educational accountability to the general public. The quality of work brought home or communicated by students themselves is not itself sufficient for this wider public. Instead, the public requests generalized and measurable criteria of accountability. Schools in this view have to produce "goods", which in educational terms amount to bringing students up to a certain level (Broadfoot 1984).

This pressure for accountability is not new. It was expressed in the nineteenth century, in England, for instance, when schools were "paid by results" for bringing students up to specific measurable standards. Even today, in the Netherlands, state grants are only given to schools whose students can demonstrate minimum competence in numerical and other basic skills (Maguire 1976).

That accountability is an important issue for the Ministry of Education in Ontario can be seen from its call for proposals in June 1984 to evaluate the probable impact of proposed province-wide testing (Nagy, Traub, and MacRury 1986). One of the four objectives of the proposed testing program was to "help meet the accountability and reporting responsibilities of the Minister to the public for the quality of education in Ontario".

- Certification: This is perhaps the most commonly recognized purpose of school assessment, especially in the later years of secondary education (Broadfoot 1979). Certification attests to students' competence in a particular area of learning upon completion of their school career or a major stage of it. This competence is demonstrated by apparently fair and objective tests or examinations usually given by teachers. The results of this assessment are compared to the performance of other students, thereby ranking students against predetermined criteria and sometimes against each other. The major aim of this ranking is to allow the two "major consumers" of the educational system, namely employers and higher education institutions, to select those they think have performed satisfactorily (McLean 1985).

Like accountability, certification has grown in importance over the years as a key purpose of assessment. Its expanding influence upon systems of assessment and systems of education more generally is attributable to what Dore (1976) in his international review of assessment trends, calls qualification inflation or "the diploma disease". This process involves an escalation of qualification requirements for the same job over time, even though the skill requirements of the job itself remain relatively static. In the pursuit of fairness within a system where formal equality of opportunity prevails, more and more students enter for examinations, tests, and other assessments at higher and higher levels in order to maximize their chances of success. As greater numbers of students attain success at each level and the pool of eligible candidates for particular jobs expands, the "gatekeepers" of those jobs raise their standards to shrink the pool and gain better quality applicants. Gatekeepers of parallel jobs do the same so as not to get left behind in the status stakes, resulting in inflation. The immediate effect of this inflation is the opening of higher level programs to increasing numbers of students, and the linking of other formerly non-certified programs to credentials in order to give them greater public credibility. Overall, certification comes to exert an ever-widening influence, becoming one of the most powerful purposes of educational assessment.

- Educational diagnosis: Assessment allows the teacher to evaluate the learning process, to identify student problems and to offer individual help or adjust the program accordingly. This kind of assessment has value not only for external publics interested in accountability or recruiting competent personnel, but also for teachers, so they can help their students by adjusting their program and improving their instruction. Assessment, in this sense, improves the quality of teaching and learning (Rowntree 1980).

- Student motivation: Most obviously, assessment motivates by the "carrot and stick" principle where students are willing to commit the effort necessary to perform a task because they are going to be rewarded for it (Natriello 1987). Motivation can also be created by student achievement being officially recorded and recognized (ILEA 1984). Where students are involved in the assessment process, assessment can also help create more responsibility among students for their own learning (Burgess and Adams 1985). Assessment can also have indirect benefits for student motivation by leading to improvements in curriculum and instruction, in the quality of the learning that students experience (Hargreaves 1989).

In a general sense, accountability and certification are important and unavoidable purposes of educational assessment. But from the point of view of the research-and-policy brief for this report, the key purposes of assessment are those that address the needs of early adolescents. Diagnosis and motivation are in this sense the prime purposes of assessment from the particular standpoint of student needs in the Transition Years. If these needs are indeed paramount in a practical as well as a rhetorical sense, then the first priority for assessment reform in the Transition Years must be that the purposes of diagnosis and motivation are effectively met.

Our review of assessment strategies in this chapter is conducted from this particular standpoint. It is not a review of the advantages and disadvantages of different patterns of assessment in general. We assess assessment, rather, in a quite particular way -- from the standpoint of the Transition Years and the needs of early adolescents in these years. Different patterns of assessment will therefore be considered in terms of their capacity to enhance or depress student motivation, to improve or inhibit effective diagnosis, and to recognize and stimulate a broad or narrow range of educational achievements and experiences.

TRADITIONAL PATTERNS OF ASSESSMENT

Historically, the two most dominant and publicly visible forms of assessment in Ontario have been provincial examinations and the assignment of grades. Ontario is not unusual in this respect. In a review of literature on evaluation processes in schools and classrooms, Natriello (1987) concluded that "the dominant technique for collecting information on student performance is some form of testing", be this at the federal or state level, at the district level, or at the classroom level, where teachers rely extensively on their own tests (Herman and Dorr-Bremme 1984; Wilson 1989). As Nagy, Traub, and MacRury (1986) point out, provincial examinations in Ontario were last administered in

1967. Since then, and until 1974, students' entrance to universities depended upon their teachers' marks and their performance on multiple-choice tests in English, mathematics, and physics. The multiple-choice program was abandoned in 1974 because the Ministry decided not to fund the development and administration of these tests, and most Ontario universities did not ask students to submit their scores when applying for admission. Since that point, admission to universities has been based on a student's best six Grade 13 credits. Throughout their school career, students are assessed by teacher-made tests and exams and receive report cards with a percentage or a letter grade regarding their performance.

Ever since the abolition of provincial examinations in Ontario, there have been many calls for their return (Nagy, Traub, and MacRury 1986). The Council of Ontario Universities in 1984 called for a return of examinations in mathematics, English (for Anglophones) and French (for Francophones). The Bovey Commission in 1984 also recommended that province-wide exams be combined with teachers' marks and school reports to determine students' entrance into universities. Editorials in the Toronto Star and Globe and Mail in 1983 warned the public that the standards of education had fallen since the abolition of Grade 13 examinations and that examinations could be used because "there is no question that the public wants more accountability in the schools" (Holmes 1984). The issue of accountability appears to be the central criterion underpinning the arguments of proponents of provincial examinations. Most recently, Radwanski (1987) argued that the current educational system in Ontario should ensure that "its graduates will actually possess the levels of knowledge and skills that today's circumstances require" and for that reason recommended the return of province-wide examinations.

One recent notable development in Ontario is the creation of a process for designing and marking the written examination in OAC1 English (the only required OAC for university admission). Rather than return to a province-wide examination, secondary English teachers and the Ministry have created a handbook and provided training to help teachers design and mark OAC1 examinations in order to ensure that the examination and the marking standards are fair and consistent across schools (Ministry of Education 1989). This process is currently being considered for a number of OAC courses.

Effects of Traditional Assessment

In all Western industrial societies, examinations began as a means of securing entrance to certain elitist professions, thus controlling recruitment to membership of those professions (Broadfoot 1979). From the beginning, therefore, examinations were part of a selection process which emphasized particular products of education. Two types of examinations have dominated the literature in recent years; minimum competency and grade-specific examinations (Nagy, Traub, and MacRury 1986). Competency tests have been widely used in the United States. Although they were originally introduced to protect the interests of students whose needs were being neglected, there is currently considerable discussion as to their fairness and impact on educational programs (Corcoran 1985).

In addition to externally set examinations and standardized tests, teachers also use their own paper-and-pencil tests extensively as a basis for grading student performance (Gullickson 1982). In fact, several studies of evaluation practices in Canadian schools in Ontario and British Columbia found that teachers prefer to make up their own tests (Wahlstrom and Daley 1976; Anderson 1989; Wilson et al. 1989).

Traditional patterns of examination and assessment have in common the following features:

- they are predominately applied out-of-context, once the required learnings have been completed;
- they are usually paper-and-pencil tests;
- they are usually norm-referenced or criterion-referenced;
- they provide the basis for scores or grades which can be used as measures of performance at individual, school, district, or state/province level.

We will now examine some of the effects of these patterns of assessment, particularly from the point of view of the purposes of motivation and diagnosis.

The arguments for and against public examinations were put most eloquently if a little quaintly almost 80 years ago by the Board of Education (1911) in England. Many more recent evaluations of the effects of examinations and similar patterns of assessment have added considerable detail but little further substance to these concisely expressed arguments.

> - The good effects of examinations on the pupil are:
>   - that they make him [sic] work up to time by requiring him to reach a stated degree of knowledge by a fixed date;
>   - that they incite him to get his knowledge into reproducible form and to lessen the risk of vagueness;
>   - that they make him work at parts of a study which, though important, may be uninteresting or repugnant to him personally;
>   - that they train the power of getting up a subject for a definite purpose, even though it may not appear necessary to remember it afterwards -- a training which is useful for parts of the professional duty of the lawyer, the administrator, the journalist, and the man [sic] of business, and secretary;
>   - that in some cases they encourage a certain steadiness of work over a long period of time; and

- that they enable the pupil to measure his real attainment:
    (i) by the standard required by outside examiners,
    (ii) by comparison with the attainments of
    his fellow-pupils, and
    (iii) by comparison with the attainments of his
    contemporaries in other schools.

◆ On the other hand, examinations may have a bad effect upon the pupil's mind:

- by setting a premium on the power of merely reproducing other people's ideas and other people's methods of presentment, thus diverting energy from the creative process;

- by rewarding evanescent (quick to disappear) forms of knowledge;

- by favouring a somewhat passive type of mind;

- by giving an unfair advantage to those who, in answering questions on paper, can cleverly make the best use of, perhaps, slender attainments;

- by inducing the pupil, in his preparation for an examination, to aim rather at absorbing information imparted to him by the teacher than at forming an independent judgement upon the subjects in which he received instruction; and

- by stimulating the competitive (and, at its worst, a mercenary) spirit in the acquisition of knowledge.

◆ The good effects of well-conducted examinations upon the teacher are:

- that they induce him to treat his subject thoroughly;

- that they make him so arrange his lessons as to cover with intellectual thoroughness a prescribed course of study within appointed limits of time;

- that they impel him to pay attention not only to his best pupils, but also to the backward and the slower amongst those who are being prepared for the examination; and

- that they make him acquainted with the standard which others and their pupils are able to reach in the same subject in other places of education.

◆ On the other hand, the effects of examinations on the teacher are bad:

- insofar as they constrain him to watch the examiner's foibles and to note his idiosyncrasies (or the tradition of the examination) in order that they may arm his pupils with the kind of knowledge required for dealing successfully with the questions that will probably be put to them;

- insofar as they limit the freedom of the teacher in choosing the way in which he shall treat his subject;
- insofar as they encourage him to take upon himself work which had better be left to the largely unaided efforts of his pupils, causing him to impart information to them in too digested a form or to select for them groups of facts or aspects of the subject which each pupil should properly be left to collect or envisage for himself;
- insofar as they predispose the teacher to overvalue among his pupils that type of mental development which secures success in examinations;
- insofar as they make it the teacher's interest to excel in the purely examinable side of his professional work and divert his attention from those parts of education which cannot be tested by the process of examination.

Persuasive though this document is, and useful as it is for stimulating debate about the benefits and drawbacks of traditional patterns of assessment, it should be remembered that it was written at another time, in another place, where the range of available assessment strategies was considerably narrower than in Ontario, or indeed anywhere else, today. With the availability of other assessment strategies, many of the claimed "good" effects of examinations are not exclusively attributable to examinations alone. Students can be required "to reach a stated degree of knowledge by a fixed date" by having to prepare presentations for a Science Fair, for instance. Similarly, "the risk of vagueness" in student writing can be lessened by formative assessment of a series of drafts, as in the Writing Folder that is now widely used in elementary and secondary school English programs. Equally, many of the alleged adverse effects of examinations also occur in patterns of assessment that take their place, like grading or teacher tests. Where tests are to be set by the teacher, students can be particularly prone to noting "foibles" and "idiosyncrasies" that might be present in their upcoming tests and standardized tests may lead teachers to excel in the examinable (or otherwise formally assessed) sides of their work to the exclusion of other less easily tested responsibilities.

While much of the research discussed here concerns the effects of examinations, our concern is not merely with examinations themselves but with traditional patterns of assessment that share many features in common with conventional examinations -- patterns of assessment which are, by and large, decontextualised, paper-and-pencil ones and administered on completion of a unit or program of study. We will consider the effects of these traditional patterns of assessment on the curriculum, on the teacher, and on the student.

◆ Curriculum Effects: Discussion of the effects of traditional patterns of assessment on the curriculum has centred on two views: narrowing of the curriculum, and emphasis on tested subjects. Although most examinations occur at the end of a student's school career, they have been criticized for having a "backwash" effect on the curriculum long before that terminal point (Broadfoot 1979). The concern here is that examinations can come to dictate the curriculum (Nagy, Traub, and MacRury 1986). In a critique of the secondary education system in Britain that was then heavily dominated by academic values and preoccupations, David Hargreaves (1982) claimed that the public-examination system gave the message to students that only examined subjects had real importance and that only knowledge, skills, and abilities that could be easily measured, especially in a written test, were really valuable. More than this, he argued, examinations systematically screened out the everyday experience of many young people from the curriculum. In music, for instance, emphasis on the intellectual-cognitive side of the subject, on ability to interpret notation within a broadly classical frame, excluded many young people from enjoying and succeeding in the subject at school. The traditional assessment of music converted a potentially accessible subject into an inaccessible, unattainable one for many students by emphasizing its intellectual-cognitive components.

Traditional patterns of assessment tend to privilege intellectual-cognitive aspects of achievement and the subjects in which these forms of achievement are pre-eminent. By narrowing the curriculum and the possibilities for achievement in this way, traditional patterns of assessment, which dominate a school's assessment system, narrow the possibilities for success and tend to create a curriculum skewed toward the academics, remote from students' everyday lives, and demotivating for many of those students we call "less able". This is true not only for provincial examinations but also for standardized testing. In a national study of uses and perceptions of educational testing among principals and teachers in the United States, Herman and Dorr-Bremme (1984) found that increased testing led to more emphasis on instruction in basic skills. Basic skills, it was found, consumed more instructional time and more educational resources, particularly in schools catering to students from poorer socio-economic backgrounds. In this context, less easily tested subjects like social studies, received less emphasis (Rimmington 1977).

Where traditional patterns of assessment dominate, it is not likely that breadth in curriculum and instructional objectives will be achieved, and it is most likely that students will be exposed to a demotivating, academically skewed curriculum, remote from their experience, at a critical point in their development.

◆ Teacher Effects: The effects of examinations on the teacher have been documented most extensively in the United Kingdom where public examinations are an important feature of the educational system. The effects of such examinations on the teacher have been claimed to be overwhelmingly negative (Mortimore and Mortimore 1984). In a survey of secondary schools, Her Majesty's Inspectorate (1979), found that:

> the work attempted in the classroom was often constrained by exclusive emphasis placed on the examination syllabus, on topics thought to be favoured by the examiner and on the acquisition of examination techniques.

This dominant teaching style, the Inspectorate observed, was "uncritical, unstimulating, and unsound". In their study of Scottish secondary school leavers, Gray and his colleagues (1983) also found that traditional teaching methods predominated in student recollections of their experience. Gray and his colleagues concluded that "one may infer that many felt there had been a conflict between studying for interest's sake and studying for examination success".

Traditional assessment patterns can also undermine innovation at the level of the classroom. In separate studies of the Schools Council Integrated Science Project in Britain, both Olson (1982) and Weston (1979) found that teachers failed to adhere to project guidelines and persisted in teaching from the board and encouraging students to revise -- practices which teachers attributed to the constraints of examinations.

Examinations constraints are not always ones to which teachers adhere reluctantly. Many teachers embrace examinations with enthusiasm, seeing in them a key resource for motivating their students at a point when enthusiasm might otherwise be waning (Sikes, Measor, and Woods 1985). However, evidence from studies of the impact of standardized testing suggest that motivation from such testing varies with student ability. There seems to be a curvilinear relationship between student performance and the levels of standards of a course. While high-ability students are challenged by subjects that have high standards, low-ability students may give up (Natriello 1987). Moreover, the motivating value of credentials varies with the school's holding power over students in relation to labour-market opportunities. Where work is readily available without requirements for credentials, or where it is so scarce that credentials cannot be "cashed in" (Hargreaves 1989) then the extrinsic motivating power of credentials is diminished.

An interesting and carefully devised study by Hammersley and Scarth (1986) raised some provocative questions about the negative effects of public examinations on teaching and learning. They compared assessed and unassessed programs taught by different teachers. They also compared the same teachers teaching different programs -- some examined, some unexamined. They were therefore able to study variations in teaching by teacher and by the status of the program as examined or not examined. Hammersley and Scarth found no significant variation in patterns of teaching between the examined and unexamined courses. However, close inspection of the study revealed that the measure of teaching effects they chose was one of quantity and proportion of teacher-initiated talk. Arguably this is an inappropriate or insufficient criterion for differentiating between teaching styles. Other criteria, such as the amount and type of groupwork or group discussion, may have yielded different results.

For some teachers examinations are a constraint; for others they are an opportunity; but for most, they are simply there -- a taken-for-granted "fact of life" to which their teaching is routinely directed (Scarth 1987). Much the same can be said for North American teachers' attitudes to grading and testing, especially when they themselves set those assessments. In a survey of teachers in South Dakota, Gullickson (1982) found that 89% of elementary teachers and 99% of secondary teachers relied on some kind of testing, and most tested at least weekly (95%) or bi-weekly (98%). Testing forms a significant part of the school culture. For half the teachers surveyed, these tests provided the primary basis for grading students (Gullickson 1984). Herman and Dorr-Bremme (1984) found that a typical tenth grade student spends around one-eighth of their time in English and mathematics completing tests. Traub and Nagy (1988) found that 12% of class time in a sample of Grade 13 calculus classes in Ontario was devoted to testing. Gullickson's (1982) and Herman and Dorr-Bremme's (1984) research raised important questions about the quality of teacher-made tests and their backwash implications for teaching and learning (supported by Stiggins 1988; Crooks 1988; Wilson 1989). Teacher-made tests, it was found

- emphasize short answer and matching items;
- rarely set essay-type examinations;
- mainly require students to recall facts and terms;
- rarely ask students to translate or apply knowledge;
- are mainly limited to lower cognitive level understanding;
- are not continuously improved by teachers in any systematic way following analysis of the quality of the items;
- are often illegible or do not assign clear directions.

Clearly, many of the criticisms commonly levelled at examinations concerning their effects on the teacher and the quality of learning that he or she offers the student are equally attributable to classroom testing and grading. Abolition of examinations provides no panaceas for assessment reform.

Crooks' (1988) comprehensive review of the impact of classroom evaluation practices on students draws attention to teachers' lack of formal training in educational measurement techniques and to the likelihood that, because teachers do not follow important assessment procedures, they may often produce reports for students that are unreliable and invalid (supported by Stiggins and Bridgeford 1985).

Grading and testing, whether internally devised by the teacher or externally imposed by the system, are deeply embedded in the culture of our schools and exert a powerful grip on teachers and their approaches to instruction. It appears that traditional practices of grading and testing are currently given excessive weight within the overall structure of student assessment and that the goal of providing a learning environment better suited to the needs of early adolescents will be met more effectively through the development of wider, more flexible, and more balanced structures of assessment.

◆ Student Effects: The British Board of Education Report of 1911 (Board of Education 1911) argued that examinations rewarded the reproduction of knowledge, passivity of mind, and the competitive spirit among students. In the United States, Bloom (1970) suggested that in their desire to beat traditional assessment systems, students resort to cramming and memorization. Many writers have commented that traditional types of assessment in the form of examinations and tests do not promote the critical and independent thinking that higher education institutions want (Makins 1977; Entwistle 1981). There is a danger, then, that traditional forms of assessment can create attitudes among students toward their learning of a cynical, calculating, instrumental nature. Deutsch (1979) notes that explicit evaluation systems can lead mark-oriented students to limit their work to what is being assessed. Achievement-conscious students may even influence their teachers, drawing them back to safer ground when their digressions and explorations appear to divert the students from their examination goal (Atkinson and Delamont 1977; Turner 1983).

One of the prominent effects of examinations on students -- more so than regular grades and tests, perhaps -- is anxiety. These effects can vary depending on the student. Some students experience mild forms of anxiety that encourage them to be more competitive and perform better (Ligon 1983). Others experience high levels of anxiety that can have debilitating effects (Sarason 1983). Thus, anxiety can either enhance or actually prevent students from showing their true skill level. Fear of failure is one aspect of test anxiety. The actual failure itself may have very damaging effects on students' self-concept and self-worth (Mortimore and Mortimore 1984) with high school dropout rates, rebelliousness, and low self-esteem as possible effects (Ratsoy 1983).

Examinations and tests also have effects on motivation and learning habits. On the one hand, students may be motivated to study for examinations and tests since they get rewarded with grades, but this motivation should be considered in light of three points made earlier. First, motivation to succeed may be greater among more able than less able students. Second, motivation is likely to hold for moderate-to-less able students only in market circumstances where credentials can be cashed in for jobs. Third, the drive to enter more and more students for examinations presents increasing numbers of students with programs of increasing difficulty which may prove over time to be dispiriting and demotivating (Gray et al. 1983). Fourth, we must ask what it is students are being motivated towards. If traditional forms of assessment reward passive acceptance of prevailing knowledge, then students are motivated towards becoming passive learners, and towards valuing cognitive skills above all others.

This raises some important closing questions about values and goals. It has been observed that testing and grading reward excellence, help students set "realistic" expectations (Ebel 1980), and prepare them for a competitive society (Simon 1972). Many people may value these goals and feel it appropriate that traditional patterns of assessment should help achieve them. But as we outlined earlier, it is important that our assessment practices conform with our broader educational goals for the Transition Years in particular and for schooling more generally. The outcomes of traditional assessment patterns appear discrepant with such goals. Instead traditional patterns of assessment appear to affect students by:

- fostering an instrumental approach to learning, particularly among higher achievers;
- creating student anxiety, especially among the less able, and particularly in the context of "one-off" examinations;
- frustrating and demotivating the less able;
- promoting qualities, such as individual competitiveness, which have a questionable relationship to broader educational goals.

Traditional Assessment Techniques and the Purposes of Assessment

How well do traditional patterns of assessment meet the different purposes of assessment?

◆ Accountability: Traditional practices generally fulfil accountability demands since the marks and scores derived from examinations and tests permit comparisons among students. In Alberta, for example, where province-wide examinations have been re-established, school trustees reported wanting to use test results to compare teachers and schools (Webber 1984). Teachers, on the other hand, have often rejected the introduction of examinations because they fear being evaluated on the basis of the scores of their students (Canadian Teachers' Federation 1982). This fear is not groundless, for the practice of comparing schools by their standardized test or examination results makes no allowances for the very different sorts of students for which those schools cater. Nonetheless, it is clear that the demands of public accountability are most clearly addressed and fulfilled when any form of tests or grades (norm-referenced or criterion-referenced) are used.

♦ Certification: The second major purpose of assessment is the provision of students with some record of their school life when they leave school. The major consumers of these certificates have traditionally been higher academic institutions and employers.

In Ontario, these records have taken the form of an average mark based on students' performance throughout their final school year (Grade 13). Studies have found that Grade 13 marks correlate quite well with first-year university average marks (Traub et al. 1977), and that universities still look at candidates' marks when deciding about admission (McLean 1985). Nevertheless, even in the universities, there is a movement away from marks towards a more holistic appraisal of students (e.g., information about students' extra-curricular accomplishments are often requested with the application to a higher education institution).

Similarly, employers are often more interested in personal qualities like commitment and responsibility than in high school marks (Broadfoot 1986; McLean 1985). Many feel that high school marks say nothing about students' commitment to work, and complain that "most graduates have no common sense at all...and all they know is what they memorize from the book" (McLean 1985). Those employers who do emphasize marks are usually ones concerned with jobs that require school-related work, such as banks, trust companies, and insurance companies. Therefore, the purpose of certification is only partly fulfilled by current assessment practices. There appears to be growing demand for certification of personal and social achievements as well as cognitive achievements, which current assessment practices are not meeting.

- Diagnosis: Examinations, which chiefly supply terminal judgements rather than identifying specific points where assistance may be required, are not good diagnostic tools. Teacher-set tests are more helpful for diagnosing basic-skill needs and identifying gaps and shortcomings in factual, low-level cognitive learning. But because they rarely focus on higher cognitive reasoning, such tests are rarely helpful in a diagnostic sense with regard to these areas of learning. Even more than this, because tests are at best loosely related to classroom tasks, what failure tends to indicate is failure at the test rather than failure at the task (Natriello 1987).

- Motivation: Motivation may be enhanced by the "carrot and stick" principle of examinations where high-achieving students are concerned. Low-achieving students, however, are prone to motivation problems arising from examination stress and from an excessively difficult, unbalanced program, skewed towards the academics. Broadfoot (1979) sums up the motivational problems incurred by traditional patterns of assessment this way:

> In our society...we choose to assess, mainly academic ability. We do not choose, by and large to assess in any formal way non-cognitive qualities such as effort, cooperation, leadership, responsibility or useful experience in extra-curricular activities such as school plays, social service units, outdoor pursuits or debating societies...Since assessment in such activities and abilities is not part of the formal assessment system, the influence of which permeates right through the informal assessment network, these activities do not provide an alternative source of motivation or self-valuation for pupils. In consequence, a potential source of motivation for non-academic pupils and a potential mechanism for the

> development of many personal qualities which most of us would regard as desirable for future members of society, are neglected.

One solution to the problem of motivation caused by the underemphasis of non-academic achievements in the conventional sense, is logically, therefore, to assess them. It is to this issue of assessing, recognizing, and rewarding student achievement outside the intellectual-cognitive domain that this chapter now turns, by reviewing alternative approaches to assessment and their implications.

ALTERNATIVE ASSESSMENT STRATEGIES

Internationally and within Ontario, recent years have seen the emergence of a range of alternative assessment strategies, developed usually to complement rather than replace more traditional patterns.

Sweden is the only European country in which assessment is almost entirely informal. At the junior level, official grades have been eliminated, although informal grading is still used by teachers. Formal grading is only used in Grades 8 and 9 when students decide about the curriculum they are going to follow. Grades in the final year ensure entrance to higher education institutions, although, in principle, tertiary education is open to all students. Standardized tests are voluntary and mainly diagnostic since they allow teachers to gauge their students' progress in relation to the rest of the country (Mortimore and Mortimore 1984). Recently, there has been a trend towards greater involvement of teachers, students, and parents in discussions about student performance, and more attention has been given to non-cognitive aspects of students' progress along with the more usual academic achievements (Duckenfield 1977).

In France, the overriding aim has been to provide equal access to the mainstream curriculum that leads to higher education (NFER 1988). At the age of 16, students take a school-leaving certificate which is now a comprehensive record of achievement compiled by teachers and open to challenges by parents. In order to get into higher education institutions, students must pass a comprehensive formal examination -- the Baccalaureate. Today, there are trends to extend the methods of continuous assessment used lower down the system to the final school years through the compilation of ongoing dossiers of student progress (Broadfoot 1984).

Germany, Britain, and the Netherlands, as well as the majority of the other European countries, have formal certification at the end of secondary schooling as a criterion for entering higher education (Broadfoot 1979). Typically, formal selection processes for secondary school have now been abolished, with the exception of Germany and some parts of Britain.

England and Scotland have moved towards a common examination system (the General Certificate of Secondary Education) for all students within a common, comprehensive school, whereas Ireland retains different forms of examination for each type of school (vocational, academic). In all three countries, assessment throughout school has concentrated on reporting results to students and parents (NFER 1988). In England, the development of Records of Achievement (to be discussed later) parallels the development of the French "dossiers" in an attempt to include non-cognitive aspects of achievement in assessment and certification (Broadfoot et al. 1988). Within the 1988 Education Reform Act, nationwide standardized testing has been introduced in the main academic subjects at ages 7, 11, and 14 (Hargreaves 1989), and performance-based assessment is being developed as an integral element of the new National Curriculum (Task Group on Assessment and Testing 1987).

The United States, unlike most European countries, does not have any formal assessment, in the form of an examination, as a selection mechanism for entry to higher education institutions (Broadfoot 1979). Students are awarded grades by their teachers and issued with a high school diploma when they graduate. During the 1970s, due to accountability arguments, standardized tests on basic skills were introduced, mainly as a means of diagnosing problems. Finally, the Scholastic Aptitude Test (SAT) is used, along with high school diplomas, by many universities to ease their selection process (Lapointe, in Nuttall 1986).

To summarize, the international trends in education assessment appear to be as follows:

- Most European countries still have summative examinations at the end of the school career in order to control entry into universities; Sweden is the only country that uses informal assessment exclusively.

- There is a clear trend towards extending assessment to non-cognitive achievements.

- There is a clear trend towards more continuous assessments that involve students, their parents, and their teachers in an ongoing dialogue about progress.

Important developments in assessment policy and practice within Ontario have also taken place in recent years. The Ontario Assessment Instrument Pool (OAIP) was developed in order to identify and define specific criteria for student performance that would be closely related to the tasks of the classroom. The Basic English Program for secondary schools developed by Ward and Cooper (1989) aims at providing teachers with a wide range of resources for assessment. This program seeks to combine ongoing assessment with summative evaluation to provide a whole picture of students' achievements. The program materials provide observable, performance-based criteria of assessment that can be listed while students are engaged in classroom tasks; a reporting profile that shows how the mark was determined in all areas of the curriculum; and formats for conferencing with students individually about their progress. The Writing Folder within the secondary school English program also contains a number of these assessment principles with students being given continuous formative feedback about their work in order to improve it over several drafts; this culminating in a final portfolio documenting the range of student achievements in writing. The Toronto Board Benchmarks Program currently being developed, is an ambitious initiative to develop assessments that are geared into classroom performance and integrated into the learning process.

In addition to all these initiatives at the school board or provincial level, we are aware of many schools and teachers also using a wide range of assessment strategies in such forms as conferencing, portfolios, anecdotal records, observation, diagnostic tests, and the like. Most of the items we have described, particularly at the individual and school level, however, have not been systematically evaluated, so that their benefits and drawbacks in the Ontario context are not fully understood. For reasons we shall see, there is also a need for greater co-ordination and coherence across teachers and schools in assessment strategies. A first useful stage in assessment development might indeed be to collate and share evidence of such practice.

For evaluation of alternative assessment strategies, we must mainly depend upon research undertaken in other countries. Bearing in mind the usual problem of transportation to the specific Ontario context, these findings provide important clues about possible and productive types of assessment development in the province within the Transition Years.

Performance-Based Assessment

Performance-based assessment involves the assessment of students in the context of classroom tasks. The tasks are designed to provide criteria and objectives that constitute a basis for the assessment. Students are assessed in the context of learning activities within the classroom. The assessment can be of a wide range of skills and knowledge -- some displayed in pencil-and-paper form, but others perhaps displayed in practical, manipulative ways, or in social interaction with other students. Speaking and listening skills, presentation and organization skills, participation and leadership skills -- these things are open to assessment just as much as skills displayed on paper. Performance-based assessment is represented in the Toronto Board Benchmarks Program and is fully described with many supportive examples in the British Task Group on Assessment and Testing (1987) document developed in relation to the implementation of the National Curriculum.

Performance-based assessment has a number of distinct advantages over traditional patterns of assessment:

- It establishes a close relationship between assessment and classroom tasks. The criteria underpinning the assessment also lay the basis for the development of the classroom tasks that are to be assessed. This is an important development in view of the commonly reported finding that teacher-designed tests and standardized tests have a loose relationship to the tasks students undertake in the classroom (National Institute of Education 1979; Natriello 1987). Performance-based assessment establishes a closer relationship between what is tested and what is taught.

- Because of the link between teaching and testing, performance-based assessment makes assessment part of the learning process.

- The establishment of a closer relationship between testing and teaching also encourages teachers to emphasize the skills being tested and the tasks being set.

- This "backwash" effect of performance-based assessment can lead to higher order learning being assessed and being taught too.

- By being task-related, performance-based assessment has the capacity to recognize and promote a wide range of skills and achievements, including personal and practical as well as cognitive and intellectual ones. This broadening of opportunities for achievement can stimulate student motivation.

- Performance-based assessment also improves the diagnosis of student learning problems by observing these problems in context.

Through a survey of elementary and high school teachers in five school districts, Stiggins and Bridgeford (1985) documented the existing awareness and use of performance-based assessment among teachers. Their results indicate that 78% of teachers report some use of structured performance tests, and almost half use them comfortably. This indicates that performance-based assessment is not an unknown or untried innovation and is already familiar to, and actively used by many teachers. However, more detailed responses to questions about teachers' precise uses of such assessment indicate several areas of concern:

- The assessments are used more widely in some subject areas (especially those dealing with speaking and writing) than in others (especially mathematics and science).

- In 30% to 40% of cases, the assessments are recorded in an unsystematic way. Scoring criteria are often not written down, judgements are frequently based on each single observation, and teachers often keep only a mental record of the assessment.

- Teachers tend to develop these assessment criteria alone rather than together -- creating possible sources of inconsistency and uncertainty in assessment policy. Isolation and individualism in teaching are often the source of uncertainty among teachers about their effectiveness -- uncertainty which itself has been found to correlate with lower academic standards (Rosenholtz 1989). Stiggins and Bridgeford found such uncertainty in their own study among teachers who individually develop and apply their assessment criteria. A stronger base of collegial planning in the development of performance-based assessment therefore seems warranted.

- In a third of cases, performance criteria are not shared with students. This is a common difficulty with teacher-designed tests more generally (Natriello 1982). This is often responsible for students' dissatisfaction with the assessment process, since they feel they have misunderstood the criteria on which they are being assessed. One advantage of public examinations is that the criteria of assessment are public and in that sense fair. If criteria of assessment are not shared with students, then students do not know how to perform well and the assessment becomes private and unfair. While this may offer some protection to students prone to anxiety, it also makes it difficult for them to achieve and may be responsible for dips in motivation if they feel they have been assessed unfairly or inappropriately (Natriello 1982).

- Teachers commonly report problems with time in the development and application of performance-based assessment, feeling this interferes with instructional time. Some of the concerns about time raise important resource issues, especially where time for collegial development of performance-based assessment is concerned. This might be an appropriate focus for professional development days, for instance. Time in administering the assessment requires, in part, a conceptual leap -- that this assessment is part of learning, not additional to it. But observing the activities of one group may still require that another teacher sometimes teaches the rest of the class. This is more difficult to achieve in isolated classroom settings with short bursts of time devoted to specific-subject learning. More integrated learning settings of the kinds described in previous chapters are likely to provide the flexibility required for performance-based assessment.

Teachers might also use some of their preparation time to assess and work with individuals and small groups, while a covering teacher takes responsibility for the rest of the class (Hargreaves and Wignall 1989). This strategy could be justified if the balance of assessment demands was to shift away from the paper-and-pencil tests and batch-marking of assignments that currently consume a great deal of preparation time, especially at the secondary school level. If one of the purposes of preparation time is to evaluate students' work and if some of the burden of assessment is to shift toward evaluating that work in the context of classroom tasks, then use of some preparation time for performance-based assessment in the classroom would not be inappropriate. For that case to be made effectively, however, there would need to be a genuine shift in the balance of assessment priorities; not simply an addition of performance-based assessment to the existing assessment load.

- A final difficulty not mentioned by Stiggins and Bridgeford, but an emerging concern in current research on the implementation of active learning (Neufeld, forthcoming), is that there are dangers in overassessment, in multiplying teachers' responsibilities for effective, structured observation. Many moments in the classroom need to be left relatively loose to enable teachers to provide care, to settle their class for a story, or to console a particular child. Such actions are an essential part of the teacher's work, especially at elementary school level (Fullan and Hargreaves, forthcoming). Evidence emerging from Neufeld's study suggests that the time demands of performance-based assessment can lead teachers to "steal" time from elsewhere -- particularly the "slack" time where they provide care for their students. Care, we have argued, is an important human quality that students still very much need in early adolescence. Overscheduled classrooms can become as frantic and fruitless as overscheduled families. This suggests that while performance-based assessment has important advantages, it is best used in moderation, as part of a broad repertoire of assessment strategies.

Portfolios and Personal Records

Portfolios are widely used among elementary school teachers and in certain secondary school subjects, like English, as a way of collecting and selecting students' work to communicate their achievements to themselves, their teachers, and their parents. In Britain, a number of secondary schools have used systems of what are known as pupils' personal records for similar purposes. These records typically provide students with opportunities to record experiences and achievements significant to them, in a continuous way. The records are usually owned by the students but may be shared and discussed with teachers if students wish. They are normally written in scheduled time devoted for this purpose. They may be written on blank sheets of paper, in response to optional prompt words or key questions, or on a series of cards with titles like "Hobbies" or "Working With Other". It is usual for personal records to be compiled in files or folders and for pictures, examples of work or other materials, of importance to the student to be added to the collection. On leaving school, the records are the students' property, and can be shown to potential employers if they wish (Stansbury 1980).

There are some differences between portfolios and personal records. Portfolios tend to collect together samples of student work from across the curriculum, demonstrating a range of experiences and achievements. Personal records tend to have more of a personal and social emphasis and are often compiled in scheduled time, but may also be used in connection with co-op education (Further Education Curriculum 1982) or outdoor and residential experience (Hargreaves et al. 1988), to document and reflect on the experience in which the student has been involved. Notwithstanding these differences between portfolios and personal records, however, they also address a number of common purposes:

- They seek to motivate less able students by providing them with "something to show for their efforts" beyond what might otherwise be a dispiriting set of grades and marks.
- They provide students with opportunities to declare their identity, to document and display things of importance to them -- another source of motivation.
- They offer students opportunity to reflect upon their experiences and achievements in and out of school and thereby to take more responsibility for those experiences and achievements.
- They give some form of recognition to achievements beyond the academic domain.
- They provide more rounded evidence of student competence and success to external publics like parents and employers.

Some of the limitations and drawbacks of portfolios and personal records are:

- They are not themselves a form of assessment. They simply supply a record, a wider range of evidence, as a basis for educational assessment. Assessment is involved in selecting items to be included in a portfolio or personal record. Assessment is also involved in judging the quality and characteristics of portfolios and personal records. But these things themselves are not forms of assessment as such.

- Portfolios and personal records may be of value at the level of the individual student, but they cannot be sensibly collated at a group level. They are too cumbersome, too divergent in form, and compiled under too many different circumstances for that.

- Because of their cumbersome nature, personal records in particular have been found to have less value for employers than first hoped, thus detracting from some of their motivational benefits (Swales 1980).

In summary, personal records and portfolios can provide evidence of a wider range of student achievements than conventional assessments often allow. These portfolios and personal records can be a source of pride for the student and provide opportunities for reflection on learning and achievement. They can be valuable in communicating student achievements and learning activities to parents but are less successful in this respect where employers are concerned.

The process of compiling and reflecting on portfolios and personal records can itself be a valuable kind of formative assessment, providing a basis for dialogue between students, teachers, and parents about progress. The key value of portfolios and personal records, then, may well reside less in the products themselves than in the formative processes of assessment which organize the ways in which they are compiled. Some process of summarizing these voluminous records succinctly would also appear to be helpful -- both from the point of view of external clients like employers in search of usable information that can be scanned relatively swiftly, and from the point of view of students themselves who will be stimulated to reflect on their achievements as they are called upon to summarize them. This leads us to our third alternative pattern of assessment: records of achievement.

Records of Achievement

Records of achievement, formerly known as "pupil profiles", first emerged in Scotland in the 1970s as ways of documenting and describing the qualities, skills, and achievements of students destined to leave school without any other certificates or qualifications (Scottish Council for Research in Education 1977). The records were meant to provide employers with useful, succinct information about students' qualities and achievements, and to enhance students' self-knowledge, motivation, and goal-setting.

By the 1980s, many locally developed schemes for records of achievement had sprung up to the point where, with Ministry encouragement, records of achievement were advocated for use in all secondary schools by the early 1990s (Department of Education and Science 1984). Although such records currently take many different forms, in practice all of them provide a method of presenting broad yet succinct information on students' abilities, skills, and achievements across a range of assessments (Murphy and Torrance 1988). The distinctive features of records of achievements are:

- They document a range of student achievements within and beyond the academic domain -- whether in the form of tick-the-box grids of qualities, item banks or checklists that list skills and achievements, or descriptive prose statements of actual achievements which signal underlying personal qualities.

- They present this information in a sufficiently succinct form that can be easily used and interpreted by parents, employers, and other clients.

- They are compiled not on a one-off basis at the end of the student's schooling but through a process of continuous one-to-one review of progress throughout secondary school. The final school-leaving record is but the last in a series of statements that a student develops in consultation and negotiation with his or her teacher over the course of his or her education. The formative process of review is at least as important as the final summative statement. It is a way of monitoring and reflecting on progress, securing greater student commitment to learning, improving educational diagnosis, and stimulating changes in curriculum and teaching to meet student needs.

- Many of the assessments, particularly those of personal and social achievements are not just documented by teachers about students, but developed by teachers and students together. Records of achievement are designed to involve students in the assessment process and thereby in the learning process, too.

In one particularly sophisticated version of records of achievement, the Oxford Certificate of Educational Achievement (1984), the Record is divided into three components -- E, G, and P. The "E" component documents all publicly recognized qualifications and certificates attained by the student, including public examination results, music and swimming certificates, and First Aid awards. The "G" component documents the skills, knowledge, and attitudes attained to particular levels in a number of subject areas -- which are documented through performance-based assessment. Lastly, the "P" component consists of a succinct prose statement which records personal and social achievements and experiences in a positive way, following periodic discussions between students and teachers who know them well over the course of their schooling. This certificate and the processes underlying it are meant to capture and stimulate the diversity of experiences and achievements that are formally valued within secondary education.

Records of achievement have been designed and developed to fulfil a number of educational purposes, although there is considerable argument as to whether these purposes are complementary or contradictory (Hargreaves 1989; Broadfoot et al. 1988):

- They recognize the whole range of students' achievements, not just academic ones.
- By recognizing other achievements, they stimulate greater emphasis to be given to them in the curriculum. If you assess and record something you have to teach it, too!
- By widening the definition of achievement, they provide greater opportunities for genuine, not contrived success.
- They help give students increasing self-awareness and independence by giving them opportunity to declare and record things of importance to them.
- They encourage students to take more responsibility for their own learning by involving them in the assessment process.
- By providing teachers with more detailed information about their students, they improve teachers' capacity to diagnose student learning needs effectively.

- When these records are compiled within subject areas, they integrate assessment into the learning process itself, giving teachers helpful information and students constructive feedback to improve performance.

- By providing feedback on student response to programs and instruction, they stimulate teachers to generate changes in curriculum and instruction of their own volition. They stimulate teacher-based and school-based change in curriculum and instruction as teachers become more aware of, and seek to respond to their students' needs.

- When used in the context of home-base time, they provide students with the right to periodic reviews of progress and personal development with one teacher who knows them well. They provide content for, as well as a context for personal care to be given to students by their home-base teachers.

- When used in the context of school subjects, they can organize and give coherence to the reporting system. They can move reports away from highly condensed summaries of progress, written at infrequent intervals, often under conditions of great stress. These reports can be replaced by periodic statements at the end of each unit of work which are discussed with students and sent home to their parents along with examples of work done on that unit, all at the same time. In this way, the formative process of assessment involved in records of achievement can be used to supply parents with a continuous flow of information about their children's progress, perhaps also including opportunities for parents to respond in writing or in person to that progress (or its absence) where appropriate.

At their best, records of achievement can integrate assessment with learning, with personal care, and with the reporting system, involving students, their teachers, and their parents as partners in the continuous process of learning.

Records of achievement are not without their difficulties. Both student and teacher skills in conferencing and self-evaluation need attention. Shortage of time is a perpetual difficulty. There are threats to privacy if rules and understandings are unclear about what can and should be recorded. But despite these difficulties -- none of which are inseparable -- critical evaluations of pilot schemes suggest there are great benefits for student motivation and for teacher enthusiasm, too, as teachers learn more about their students and become more involved with them as partners in the learning process (Broadfoot et al. 1988).

CONCLUSIONS

In this chapter, on the basis of the literature review, we have pointed to the importance of establishing a broad and balanced range of assessment strategies in order to capture the many different purposes of assessment, such as those of accountability, certification, student motivation, and effective diagnosis. We have reviewed literature which suggests that some assessment strategies are more widely used than others and that these, in the form of grades, tests, and examinations, recognize, reward, and give emphasis to intellectual-cognitive achievements above all others, narrowing possibilities for success, and creating threats to student motivation.

We then described and reviewed a range of alternative assessment strategies including performance-based assessment, portfolios, and records of achievement which recognize, reward, and give emphasis to a wider range of achievements. These alternatives increase the likelihood of boosting student-motivation. Such alternative strategies used in conjunction with existing ones, it was suggested, also help provide an environment of care and support for the early adolescent, they improve the quality of teacher diagnosis, and they integrate assessment more effectively with the learning process and the reporting system. This gives greater coherence to the early adolescents' education and helps schools in their efforts to meet the needs of young people at this important stage of their development.

Many of the alternative assessment strategies described are already widely used. But they are often developed and used by teachers in isolation, and the criteria are not sufficiently shared with students. Assessment drives the curriculum. If the needs of early adolescence are to be met by a coherent, relevant program, and by a caring system of help and support among a community of teachers who know these students well, the assessment system should be planned to support the required programs and the required processes of care. We have seen that inflexible assessment systems undermine many of our curriculum and guidance objectives. Reform in the Transition Years provides important opportunities to change that, to develop an assessment system that is primarily designed to support the program and guidance needs of early adolescence. In this sense, assessment is no mere side issue. It is one of the most important challenges schools have to face in reshaping their provision for the Transition Years.

CHAPTER SIX

FRANCO-ONTARIAN SCHOOLS

BACKGROUND

The following review of selected research on Franco-Ontarian schools seeks to build on the key issues identified by Hargreaves et al. in the other chapters of this study, and to relate to them the needs and concerns articulated in the research pertaining to the education of young Franco-Ontarians in the Transition Years.

For this review, a number of library and computer searches were made, particulary the database at the Centre de recherches en éducation franco-ontarienne (CREFO), Liste des publications des membres du Centre de recherches en éducation franco-ontarienne (mars 1990), ONTERIS, Canadian Education Index and the OISE library catalogue. To provide context for the literature which focuses specifically on Franco-Ontarian concerns, searches of ERIC and the British Education Index were undertaken to look at educational research in minority populations which have some similarities to the Francophone population in Ontario. In addition, a search of EDUQ was made, and although a few studies are reported which concern the Transition Years or, more likely, the problems of adolescents during this period, the research listed in this database was primarily concerned with Francophones in a majority (Quebec) setting rather than in a minority setting such as is the case in Ontario.[1] Since *Rights of Passage* focuses on adolescent and school concerns in a majority setting, these studies, with one exception (Crespo 1980), are not commented upon here, nor are studies of problems which are part of the general experience of adolescence.

---

[1] Although there are a few settings where the Francophone population of Ontario is locally in the majority, as a whole, Franco-Ontarians are in a minority position.

In a review of research concerning minority-language groups, Rist (1983) identifies the situation of the Francophone minorities in Ontario, Manitoba, and New Brunswick as closest to the minority populations in Spain (Catalonia) and Wales. Each of these minority populations is indigenous, as opposed to newer immigrants, and has certain historical language rights. The language rights in Switzerland and Belgium tend to be geographic, similar to those in Quebec, with the Swiss cantons and the Belgian provinces having specific language rights.

Churchill (1986) notes another similarity of the Francophone situation in Ontario to that existing for minorities in Wales and Catalonia. In Ontario, French was historically a lower prestige language associated with the poorer performance in school of Franco-Ontarians than of Anglo-Ontarians. O'Donnell's research (1988) found that Catalan has increased in prestige as it has undergone linguistic normalization by extension to all social levels and situations. The language situation in Belgium may have some similarities with that of some Franco-Ontarian communities. Studies of the population along the Belgian language boundary tend to show that Dutch, even among bilingual French-speakers, is not a favoured language except in extended family settings (Hunt 1987). It was not clear, however, from this study if Dutch is considered to be less prestigious than French; rather the Francophone population felt that the Flemish people were linguistically superior, and they were therefore less inclined to speak Dutch even though they were able to do so.

In Switzerland, however, since French, German, and Italian were spoken in nearby culturally prestigious countries, superior/inferior status relationships seemed to be less important (Churchill 1986).

In the literature and computer searches, a few studies from Britain and Spain were identified as having relevance to Franco-Ontarian education within the framework of the report. These studies will be referred to as they become relevant to the discussion. Other European studies, for example, those of Huberman (in press), are concerned with the Transition Years, but the Transition Years in a context of a *minority* setting are not considered. These studies are analysed in the earlier chapters, and are not referred to here.

CONTEXT: COMMUNITY ATTITUDES AND PRESSURES

A question which a community does not have to face in a majority setting is that of cultural and language retention. In Ontario today, students and the parents of students in the Transition Years have a choice of confessional or lay schools which offer programs at the secondary level. A choice of language of schooling has now become available for many Franco-Ontarians, and students and/or parents must decide if the student is to choose a separate or public secondary school where the language of instruction may be English or French. Community attitudes may play an important part in this choice.

The recent research of Frenette and Frenette (1990) has shown the evolution of the organization and management of minority-language secondary schools. They discussed the situation which has arisen from the creation of publicly funded Roman Catholic secondary schools (which may be English or French) beyond the Grade 10 level, and the public secondary schools which are now under the jurisdiction of the Franco-Ontarian community. These structural changes have created a number of problems for French-language schools, many of which were secular and bilingual because the element of choice of school for the

Francophone population has widened. However, Frenette and Frenette found that the previous separation of religious elementary and public secondary schools, and the present organization of all the school boards based on abstract, technical management principles (as opposed to being closely tied to the Church) have led to the disaffection of many of the Francophone elite for religious instruction. The new system has thus created competition for clientele.

> Unless other changes come about, it is now foreseeable that the final result of recent reforms will have been to create a radical separation between the new governing class of Franco-Ontarians, formed by modern and "neutral" not to mention technical values, and the underclasses which are more attuned to traditional values and less engaged in the construction of modern society (pages 18-19, English version).

Franco-Ontarian parents and students now have a wider choice of educational facilities than they had before, when their selection was made on a religious, or, more rarely, on a language basis (Frenette 1984).

In some sections of Wales, parents of elementary school children also have a number of choices available to them (although parochial schools apparently are not among them): Welsh medium (language) schools, schools in which some subjects are taught in Welsh, schools where Welsh is taught as a second language, and unilingual English schools (Baker 1985). Much the same choice of schooling is offered to Catalan- and Castillian-speaking parents in certain areas of Catalonia. Catalan parents generally favour education in their language, or at least they do not oppose it; Castillian parents apparently approve of education in Catalan, and wish their children to be part of it

(Siguan 1980). (A similar situation, perhaps, is indicated by Heller (1986) as Anglophone parents seek access to French-language minority schools.) In the secondary system in Wales, the number of schools in which Welsh is taught as a first language is about three per cent of the total, but there are more (about 60) bilingual schools.

Despite the increase of the amount of Welsh being taught in the schools, the assimilation of the Welsh-speaking population to the English-speaking majority is a major concern. In recent years, Jones (1983) has examined the dilemma of education facing the Welsh people: whether the allegiance to a wider empire makes a superior demand over an awareness of belonging to a local community. He suggests that Wales has preserved its identity in character, language, and tradition. Williams (1983), however, notes that the revival of Welsh language and culture and the formal incorporation of Welsh into the schools is occurring at the same time as the traditional socio-economic context of the Welsh-speaking environment is being eroded. Khlief (1979) felt that the emphasis on revival of the Welsh language and on seeking institutional supports for Welsh was an index of the resurgence of a suppressed identity, an assertion of a sense of community, and a quest for socio-economic change.

A similar resurgence of activism has occurred among Franco-Ontarians, especially those in the middle class who are also seeking greater control over desired resources, be they linguistic, cultural, or material. Heller (1986) notes that,

> Broadly speaking, working-class Francophones (many of whom have intermarried with non-Francophones) tend to be less convinced than middle-class Francophones of the value of a purely French-language education. French has less value for them as linguistic capital, since it is in middle-class economic sectors that French tends to have its highest value....(page 5)

Similar findings were reported by Bourdieu and Passeron (1977). Heller (1986), Churchill et al. (1985), and Béniak et al. (1985) have found that assimilation to the majority community does not generally seem to have resulted in collective social mobility for those who chose this route.

With the desire for increased control over desired resources, Franco-Ontarians have felt the need to control their own institutions, especially their educational institutions, in order to preserve a separate identity and increase their access to upward social mobility (Heller 1989). However, it can also be argued that these same Franco-Ontarian institutions, formerly under the control of the Church and the community, have increasingly come under the control of the provincial government (Mougeon and Heller 1986). It is also clear that Franco-Ontarians do less well than non-Francophones on general measures of social success (access to well-paying jobs, education, and training). The chosen strategy to remedy this situation has been to provide access to education and training in French rather than to facilitate assimilation into Anglophone institutions. Heller's article raises the question of the possibility of developing strategies which permit a broadening of the life chances at the same time as they allow for the co-existence of different points of view. She asks the question as to whether there is a possibility of the co-existence of radically different goals.

Assimilation of the minority by the majority has always been a reality in a minority community, and the community counts on the schools to help stem the tide by teaching the minority language, maintaining the student in the minority culture, and by providing a cultural resource for the community (Frenette 1988). Frenette (1981) puts forth the view that the "school must become a community and the building must become a focal point for the French-speaking community outside the school." He also believes that in the future we will see the French-language school exercising a much more important role in maintaining a sense of community among Franco-Ontarians.

Morgan (1988) notes that the maintenance of the Welsh language may depend more on the establishment of a Welsh-using prestige institution outside the home which would have the allegiance of the young. School, the Eisteddfod, and chapel, traditional bulwarks of Welsh culture, may not be enough since the school year is only 39 weeks long and both school and chapel may inspire ambiguous feelings in the young. Another difficulty noted by Morgan is that the students may not find it easy to use their Welsh outside the school setting. Edwards (1983) felt that the media and the educational system, as well as the establishment of a Welsh-medium university, might help the Welsh language to survive. It is possible that the establishment of a unilingual French-language community college in Ottawa will assist the survival of French in Ontario.

Edwards also notes that it would be naive to expect the schools to succeed entirely in their efforts to reinforce positive attitudes towards Welsh. Teachers, he notes, tend to measure the attitude of their pupils to Welsh by the amount that can be heard in the schoolyard. "The language of the playground may be dominantly English, even though pupils when questioned will claim to have strong positive attitudes to Welsh. Why should this be? Simply it is a reflection of the dominant culture to which may be added a degree of adolescent rebellion." (page 254)

Mougeon and Canale (1978/79) have also argued that French-language schools are not sufficient to prevent the assimilation of Franco-Ontarians. Churchill et al. (1985), in their ethnographic study of minority Francophone education in Ontario, warn Franco-Ontarian parents that they must make an active effort to maintain the language in the home. Desjarlais' (1983) study of students in French-language schools in Ottawa reinforced this viewpoint when he found that the maternal language and the language of the community were the most important factors for the "francité" of the family. Arnau similarly found that the pupils' Castillian and Catalan proficiency was based on environmental and individual factors.

Desjarlais' research also found that the majority of the families watched English-language television and read English-language newspapers. When asked why they sent their children to French schools, the parents replied that they wanted them to be exposed to French language and culture. They also stated that they wanted their children to be bilingual and felt that it was necessary for them to attend a French-language school in order to achieve this goal. The implication seemed to be that, if the students did not learn French in French schools, they would likely become unilingual Anglophones. Mougeon (1984), however, found that French-language education had not stopped assimilation. He posited that assimilation is directly related to the demographic weight of the Francophone community.

Churchill et al. (1985), Canale et al. (1987), and Frenette (1988) all point out the danger of allowing too many non-Francophone students in a French school, because a large number of non-Francophones will inevitably impose their own culture on the class. Frenette feels that French-language schools should not allow non-Francophones to enrol, and Churchill points out that non-Francophones have been shown to slow down the learning process in French, and to lessen the cultural context of the school. Canale et al. outline a number of ways in which French-language schools can provide extra help for Anglophone students to improve their French if there is a number of Anglophone students enrolled in the school. They also point out that, in situations in which Francophones are clearly in the minority, the important factor for admission to French-language schools is a positive attitude on the part of parents and children towards French, and less on the students' French-language proficiency. Where Francophones are clearly in the majority, the reverse should be the criterion.

Another reason established by researchers for the abandonment of French was the low prestige attached to it by the Franco-Ontarian population. Mougeon (1984) found that Franco-Ontarians felt that French lacked value as a means of socio-economic advancement in spite of the fact that French is a highly prestigious international language and that Quebec, like France for the Swiss-French, is close by (Beaudoin et al. 1981). Frenette (1981) also found that Franco-Ontarians have a decided inferiority complex concerning their language. Some will deliberately raise their children in English with the knowledge that the French-language schools will teach them what they consider to be "real" French.

ADOLESCENCE AND TRANSITION

One study by Quirouette et al. (1988) has focused on the probable causes for many adolescent Franco-Ontarians not finishing their secondary schooling. The research team looked at Grade 9 and 10 students in Ottawa French-language schools to identify those who were likely to drop out of school. The Grade 9 students identified as potential dropouts felt dissatisfaction with their school work, had a feeling of isolation at school, lacked interest in school, were influenced by their families to leave school, and felt a lack of self-confidence. Grade 10 students gave many of the same reasons for dissatisfaction with school, but also felt they were not getting the support they needed from the teachers. Quirouette pointed out that other studies have shown that fewer Franco-Ontarian students go on to university than the general population of the province. He felt that this result is not a feature of Grade 13, but was a feeling of dissatisfaction that had been building up for years, perhaps since elementary school. Although the last part of the study has not been completed, the author points out that the division of the secondary school program into basic-, general- and advanced-level courses provides another route to failure for students, as they drop out of advanced courses into the other levels. These findings are consistent with research on secondary school dropouts, and do not point to features that may be specific to Franco-Ontarian students and French-language schools.

A further problem commented upon in the earlier chapters of this report is the isolation which teenagers may feel as they are suddenly thrust into the larger and geographically more complex environment of the secondary school. The same feeling of isolation will, of course, afflict Franco-Ontarian teenagers as they proceed from the smaller setting of the elementary school to the much larger setting of the secondary school. In some ways, however, many Franco-Ontarian students will have an easier passage since most of their schools tend to be smaller than the large non-French schools. For example, in one French-language school in the CS Rive Nord, the Grade 9 enrolment in 1988-9 was 63 students. With the establishment of self-governing French-language secondary schools, it is important to note that Churchill's (1985) suggestion for a communications network to connect young Franco-Ontarians throughout the province will be fully implemented. He suggests that this will give them a greater sense of participation in the community and a sense of belonging to a larger group which shares their culture.

Culture shock in moving from the elementary setting to the secondary is now perhaps less severe for many Franco-Ontarian students than formerly, since they are now able to complete their secondary schooling in either the confessional schools if they attended French-language separate schools, or in public French-language schools governed by members of their own community. They now have a better opportunity to have a continuity in the cultural pattern of their schooling than they had before when they were generally obliged to move from one system to another, and often from one language of instruction to another. The French-language system which is now in the process of separating itself from the English-language system is now better placed to provide what the earlier chapters of this report call a "sense of home" or community within the school. Nevertheless, ACFO (1983) notes that orientation and guidance services available in French-language secondary schools do not meet the standards set in the majority-language schools.

CURRICULUM AND INSTRUCTION

The problems which have been discussed in the academic curriculum of the majority secondary schools also exist in the French-language schools. The main report suggests that the curriculum "is not always relevant, imaginative, or challenging" (p.190). Crespo (1980), in his study of Francophone adolescents in Montreal found that:

> the students strongly favoured a content more responsive to their individual and collective experience, and a style of teaching as much concerned with their affective as with their cognitive needs. While they respect the role played by those adults who manage their schools, they nevertheless feel entitled to some response to their expectations and some answers to their questions. Their expressions of repugnance for the depersonalization of the school's style are firm, but not immoderate. (abstract)

Churchill (1985) also asks if the programs in schools where Franco-Ontarian students are taught are appropriate for their needs. He notes that the schools not only have the responsibility of teaching certain bodies of knowledge in French, but that French-language schools have the twofold mission of communicating to the students a sense of belonging to a community, and of communicating to the community that the school is a resource for that community. Heller (1989) noted that

> C'est la responsabilité de l'école d'aider les élèves à élargir leur gamme de compétences en français et à s'emparer de leur répertoire linguistique, c'est-à-dire de reconnaître le lien entre l'utilisation de la langue et les possibilités sociales (page 8).[2]

Special problems facing Franco-Ontarian schools because of the frequent substantial numbers of English-dominant students enrolled in them are discussed by Bélanger et al. (1986). They discuss a number of alternatives for solving the dilemma of too many levels of fluency in the same class and school. Their research has shown that the recommended alternatives for dealing with this population were seldom put into place.

Another serious problem for the Franco-Ontarian schools which is less severe in the majority-language schools is that of having sufficient and appropriate curriculum materials. The problem would seem to be common in minority-language education, and Morgan (1988) notes that curriculum materials, particularly for computers, are in short supply for teaching Welsh. The Association canadienne-française de l'Ontario (1983) has pointed out the need for teaching materials in both print and audio-visual format for the Franco-Ontarian schools. Heller et al. (1988) delineate the problem in Franco-Ontarian schools when they point out that books from Quebec are often unsuitable for the Ontario curriculum and Franco-Ontarian students, and that books translated from English are not adapted to the culture of Franco-Ontarians. They note the need for government subsidies for the production of curriculum materials since the market is small, and materials development is time-consuming. CREFO has already developed some teaching materials which require the use of innovative teaching strategies. Churchill et al.(1985) have noted in their study that it is essential for libraries which serve the Francophone population to have an adequate supply of books in French. These are important considerations in any move towards a core curriculum in Ontario.

---

[2] "It is the school's responsibility to help students to enlarge their range of what they can do in French and to take control of their linguistic repertory, that is, to recognize the connection which exists between the use of language and social contexts."

The question of the smaller numbers of Franco-Ontarians than majority Ontarians who reach university is of critical concern to Franco-Ontarian educators. Some of the problems outlined by Frenette et al. (1985) are: the lesser amount of time spent by elementary teachers on mathematics and science, the correspondingly greater amount of time spent on language per se, the lack of teacher expertise in mathematics and science, and the avoidance of the "pure" mathematics and science in the secondary curriculum. The authors note that while Franco-Ontarian students will study biology and applied mathematics, these are not the courses which permit the widest selection of courses at the post-secondary level. They further note that French could be more efficiently taught as a language of communication if a language-across-the-curriculum approach were applied in the elementary schools, and that Franco-Ontarian teachers at all levels should emphasize less the content of what they teach in favour of the thought process which leads to discovery of the subject matter. The authors conclude their study by recommending that the Franco-Ontarian educational system needs to be reformed in its entirety:

> S'il faut chercher les responsables, il faut plutôt songer à une responsabilité collective. En effet, le système des écoles accuse une certain cohérence. L'enseignement dispensé à l'élémentaire, par exemple, reflète au moins en partie l'enseignement reçu par les enseignants au postsecondaire. C'est

> pourquoi les priorités en matière de programmation que nous avons esquissées ici visent l'ensemble du système, et devraient intéresser autant le palier postsecondaire que les autres niveaux (p. 105).[3]

The recommendations made are consistent with the kind of core curriculum described earlier in this report which establishes breadth and balance across different areas of educational experience (including the linguistic, the mathematical, and the scientific) and which does so in terms of broad criteria rather than specific contexts.

This report recommends that teachers in the Transition Years "should draw the best from models of instructional practices and approaches....Teachers should be encouraged and expected to expand their instructional repertoires...." A number of studies of minority-language issues have also touched upon the subject of teacher training of Franco-Ontarian teachers. Fullan and Connelly (1987), in their submission concerning the future of teacher education in Ontario, noted the need for additional teacher-education facilities for Laurentian University and the University of Ottawa. Frenette (1987) found in his survey of Franco-Ontarian teachers that they want practical courses to use in teaching and they also need more information about courses and programs offered by Francophone faculties of education.

Minority teacher education as an issue is not confined to Ontario. Siguan (1980) and Morgan (1988) both note the need for adequate teacher preparation for Catalonian and Welsh schools respectively. In Wales there appears to be a shortage of Welsh-speaking teachers, and in Spain, teachers' Catalan language skills are sometimes not adequate.

---

[3] "If we must search out those responsible, we must look at a collective responsibility. School systems show a certain coherence. The education given in the elementary years, for example, reflects at least in part, the education which teachers received at the postsecondary level. For this reason the priorities of curriculum planning which we have suggested here are directed at the whole system, and should interest the postsecondary level as well as the other levels".

Heller (1986) pinpoints a central problem in the issue of teacher training for Franco-Ontarian teachers. Administrators and teachers are generally trained for education in majority settings with relatively homogeneous student bodies. These conditions rarely exist in French-language minority schools in many areas of Ontario, especially in the southern part of the province. She further notes "that little attention is paid to the problem at the government-policy level, even though it is relatively widespread." (page 8)

Cazabon et al. (1982), Beniak et al. (1984) and Frenette (1981) all point out another need in both the preservice and continuing teacher education of Franco-Ontarian teachers. There is certain linguistic knowledge of which Franco-Ontarian teachers should be aware as they teach the French language. Frenette (1981) noted that some teachers have a tendency to try to eradicate the vernacular rather than building on it. Cazabon et al. (1982) noted that few teachers are able to make a distinction for pedagogical purposes between what they consider to be "mistakes" which are legitimate usages in popular Canadian-French speech, and "un-French" vocabulary or grammatical structures. Many do not recognize that Franco-Ontarian speech is an authentic language system. Beniak et al. (1984) point out the need for a detailed analysis of a corpus of spoken French and ethnographic data to uncover both linguistic and extra-linguistic information which can be used to the teachers' advantage in developing an adequate pedagogy for French-language instruction in a French-minority setting. Mougeon (1984) summed up the problem and recommended:

> The socio-linguistic approach to teaching French, which is the basis of the new programs designed for Quebec's Francophone students, might be adopted to great advantage by Franco-Ontarian educators. One of the goals of this approach is to encourage students to master "correct local French" by comparing the characteristics of this variety of French with those of familiar Canadian French, and by providing an understanding of the social and stylistic features appropriate to each of the registers. This goal presupposes that we recognize the "system" concept and the major role played by familiar Canadian French.

It has been noted that teachers should use as many different teaching strategies as possible, provided they fitted the activity being presented. This is a recurring theme in Franco-Ontarian research. Churchill et al. (undated), in their study of Grade 7 Franco-Ontarian mathematics and geography classes, found a surprising sameness in teaching methods. Frenette et al. (1988), in a manual which describes various pedagogical practices which can be used in a variety of situations, remind the teacher of the necessity of introducing a wide variety of activities.

A promising new development is the Projet d'excellence pédagogique des francophones de l'Ontario (Courte 1989). This project brings together seven boards of education to develop a professional development model which will assist teachers in integrating the needs of students and learning processes.

ASSESSMENT

Assessment, as has been noted, goes hand in hand with curriculum. Satisfactory tests in minority situations where norms, and even standardized tests, etc. have not been developed, seem to be rare.

Baker discusses the problems and procedures of producing test norms for bilingual populations in Wales. One of the difficulties is defining subpopulations for separate test-norm production. The conclusion reached is that classification of pupils for test-norm creation purposes should be empirically based, and that one test, subdivided for those at different levels in language development, would allow the less developed to stop at a certain point, the more developed to start at a higher level, and those in the middle to tackle both levels. This is possibly the most sympathetic manner in which to test bilingual populations. Also in Wales, Price (1980) notes that the same reading test was used for both Welsh first-language and Welsh second-language students. This practice has not found favour with Franco-Ontarian and other researchers because of language and cultural differences (Cummins 1984).

Churchill et al. (undated) noted that the IEA instruments which they wished to use in their study of Grade 7 Franco-Ontarian students were only available in English. The project team had to spend considerable time and money translating test items into French and then had to adapt them for a Franco-Ontarian context. Desjarlais also used vocabulary measures specifically designed for Franco-Ontarian students in his study. Canale (1984) pointed out the necessity of developing tests which would measure proficiency in the actual language used by Franco-Ontarians, rather than using tests which require the grammar of Standard French. He concluded that not only did the instruments have to be valid and measure what they are intended to measure, but the tester must also determine if what the tests are measuring is relevant to success in academic programs in a minority-language setting.

In their paper concerning the implementation of Bill 83 in Franco-Ontarian Schools, Canale et al. (1983) pointed out the unsuitability of identifying children, at both the entry and later levels, using instruments which were either in English or translated into French. They also note that few Franco-Ontarian teachers are trained to administer and assess the results of the tests. Here again, they point out, the questions of the teachers' attitudes to certain varieties of French spoken by many Franco-Ontarian students, and of the assessment of language by inappropriate instruments tend to make the results somewhat suspect.

Difficulties enough come to light when identical procedures are used for the Franco-Ontarian populations of, for example, Hawkesbury and Toronto. Assessment and evaluation procedures cannot easily be transferred. As Frenette (1981) has pointed out:

> ...it is not at all evident that educational experience can be transferred from one part of the country to another. We can all learn from another situation, but that does not mean that solutions found elsewhere can be transposed with impunity (p.1).

CONCLUSION

The educational needs of the Franco-Ontarian community have been thoroughly outlined by Churchill et al. (1985), but their report has not closely examined the specific needs of students in the Transition Years. There remains a need for research for this age group with the emphasis on students in minority and isolated situations. Questions concerning the adjustment and achievement of this group of students as they progress from French-language elementary schools to the new French-language secondary schools will need to be answered. For example, do the students now experience less anxiety than they formerly did when they graduated from a French-language elementary school to an English-language secondary school? What are the attitudes of the different social and economic classes of students and those of their parents towards completing all their education in a French-language school? Do the students find the French-language secondary schools relevant to their present and future needs? Do the students feel confident that the content offered in Franco-Ontarian schools, especially in mathematics and science, meets their present and future needs? These questions, as well as the other long-term research needs outlined in this report, will need to be looked at in the near future.

CHAPTER SEVEN

KEY ISSUES IN THE TRANSITION YEARS: THE RIGHTS OF PASSAGE

It should be clear by now that the Transition Years, the years of young adolescence, are neither simple nor predictable. This is a time when children are becoming adults, when they are changing, developing, and forming their own identities, when they are exploring educational and vocational possibilities, and when they are laying the foundations for their lives as adults. While all of this is happening, they are also trying to adapt to a different form of schooling with its own norms, values, and expectations. Throughout this review, we have tried to identify many of the factors that might contribute to the ease or difficulty with which young people move through the Transition Years -- factors related to adolescents themselves, factors related to schools and the cultures within schools, factors related to curriculum and to instructional practices, factors related to teachers, and factors related to assessment and reporting about students' success. None of these factors acts in isolation and none is necessarily more important than any other.

The passage of early adolescence is a difficult one. So is the passage from elementary to secondary school. There are rites of passage in this transition; unavoidable changes in status which the young adolescent must negotiate. Young people also have rights of passage that attach to this important phase of their development -- rights which, if recognized, will help them adjust successfully to the experience of transition and to the opportunities and demands of secondary education. Among these rights of passage, we would include the following:

- the right to adult care, community attachment, and a sense of "home" in the early years of secondary school
- the right to a broad and balanced curriculum which maximizes students' opportunities to learn and achieve across a wide range of areas of experience

- the right to periodic reviews of progress with an adult in school who knows the student well.

In the remainder of this chapter, we highlight the key issues and relationships that have been identified and described in considerable detail throughout the review, those issues and relationships that we believe should be considered in making any policy changes or in attempting to make the Transition Years in Ontario schools flow more smoothly.

CONTEXT

- Destreaming Grade 9 is a "fait accompli" that should now be left behind. It is time to move to the next stage of providing school system administrators, principals, vice-principals, chairpersons, department heads, and teachers with the information and experiences they require to ensure this policy move will, in fact, result in improved instruction, equality of opportunity and outcome, reduced dropout rates, and better preparation and decision making on the part of young people.

- The material in this Transition Years review has been guided by three basic assumptions :

  - Programs and services for the Transition Years should primarily be based on the characteristics and needs of early adolescents in our society.
  - The different aspects of schooling should be dealt with as an integrated system.
  - The development and implementation of any changes should be based upon theories and understandings of educational change.

ADOLESCENCE AND TRANSITION

◆ Young adolescents are complex individuals who are adjusting to profound physical, social, and emotional changes, developing a sense of themselves and their value, establishing independence, establishing affiliations and relationships with same- and opposite-sex peers, and becoming more aware of the social and political world around them.

◆ Adolescence, by its very nature, engenders conflicts and inconsistencies that may result in feelings of alienation, powerlessness, and frustration.

◆ Educational institutions can contribute to the problems of students in the Transition Years by adding another dimension to the transition, that of moving from the culture of the elementary school, with its emphasis on care and control, to the culture of the secondary school with its emphasis on subjects and timetables. Young adolescents leave a nurturing but perhaps overprotective environment where they have achieved the relatively high status of being senior students for one which often polarizes them into groups, reinforces their isolation, and relegates them to the lesser status of "lowly grade nines".

◆ School culture includes both content (i.e., the shared sets of norms, values, and beliefs of members of an organization) and form (i.e., the patterns and relationships among these members). Some of the norms of a culture are "sacred", in that they are almost always accepted as fundamental and unchanging, while others are "profane" or acknowledged to be the particular way things are done and, therefore, more subject to change.

- Students in the Transition Years generally experience some anxiety about the transition to secondary school, especially about the unfamiliar and unknown aspects of the new environment, about their own ability to cope and succeed and about their impending relationships with other students and with teachers. This anxiety about transfer is relatively short-lived; it is often offset by positive excitement and expectations about the new school, and it can be reduced by well-orchestrated induction programs.

- Once students enter secondary school, they go through a longer term period of adjustment and adaptation to this new environment. There is considerable evidence that this adjustment is a much more difficult one. Many students experience lower achievement, loss of motivation, and reduced satisfaction with school -- all factors that have been associated with dropping out of school.

- Some groups are more at risk than others during this adjustment phase -- for example, low SES and minority students; students who are bused to school; low achievers (especially boys); and girls with low self-confidence.

- Little concerted attention is given to curriculum continuity across the elementary-secondary divide.

- The most substantial and significant differences between elementary and secondary schools are not those of instruction. Differences in instruction are much smaller than is commonly thought. Elementary and secondary teachers often hold exaggerated stereotypes of these differences. The key differences, rather, are ones of size; number of teacher contacts; program; and how well each system provides students with a "sense of home".

◆ A variety of alternatives to current approaches to transfer and transition exist, even without a complete reorganization of the school system:

- overcoming the obstacles of "choice" of secondary school to build constructive liaison between secondary schools and their feeder schools;
- encouraging and facilitating communication, joint planning and joint work among teachers from different school levels through meetings, visits, exchanges, and by establishing norms of collaboration and collegiality;
- providing specific training for teachers who work with students in the Transition Years;
- providing for and encouraging some career flexibility among the teaching force to work on both sides of the elementary-secondary divide;
- ensuring that student records are well-written, accessible, and used by receiving teachers;
- creating orientation programs for students entering secondary school that allow students and their parents to get a realistic and thorough sense of what the next stage involves.

◆ "Middle schools" may provide a smaller, safer, more caring environment for young adolescents. However, the literature suggests that these are possibilities, not guarantees.

◆ More enduring solutions to the problems of long-term adjustment to secondary school include:

- reducing school size to create an intimate, supportive environment;
- creating "schools-within-schools";
- developing a sense of "home" or community within the school.

CURRICULUM AND INSTRUCTION

- In its fundamentals, secondary school curriculum has not changed dramatically since the "turn of the century". It is not always relevant, imaginative, or challenging.
- Secondary schools are deeply entrenched in an academic orientation that is perpetuated by a large number of beliefs and traditions which make this academic orientation among the most powerful of the "sacred" norms of secondary schooling.

- This pervasive academic orientation creates a curriculum that is unbalanced, is content-driven, has limited relevance for many students, and results in fragmentation of student experience and balkanization of secondary schools and their departments.

- The creation of a core curriculum has been proposed as a vehicle for providing equality of opportunity, for achieving quality in education, for transmitting and developing common values, knowledge, and skills in the culture, for ensuring that all students reach a minimum level of competence in basic skills, for stimulating and recognizing a range of educational achievements, not just academic ones, and for securing coherence in curricular, instructional, and guidance objectives.

- A core curriculum likely to meet most of these criteria is one defined in terms of broad areas of experience, leaving high discretion for school-based curriculum development, and implemented through services of support and review provided by school board consultants and superintendents.

- A core curriculum and the patterns of instruction and assessment associated with it should recognize, reward, and give emphasis to a wide range of educational achievements in the practical and personal and social domains as well as the cognitive one.

- The Transition Years should draw the best from models of instructional practices and approaches, such as team teaching, interdisciplinary mini-courses, small-group co-operative learning, learning styles, and experiential education in order to provide a flexible, fluid, and responsive educational environment.

- The temptation to try and move teachers into the wholesale adoption of new instructional strategies like co-operative learning should, however, be resisted. Changes in instruction should be undertaken only in conjunction with changes in curriculum, assessment, and guidance. Teachers should be encouraged and expected to expand their instructional repertoires, rather than switch all of their teaching to a completely new approach. And teachers should be allowed to try new strategies at their own pace and comfort level. Where changes in instruction are concerned, slow and sure is better than quick and slick.

ASSESSMENT

- Assessment is the tail that wags the curriculum dog. It operationalizes our goals as much as it reflects them. Curriculum and assessment reform should therefore be undertaken together.

- Broad curriculum goals should be reflected in a broad assessment policy. Lack of balance in assessment strategies will create lack of balance in curriculum.

◆ Assessment cannot be abolished but it can be reformed. The driving force behind such reform should be the goal of meeting our curriculum and instructional objectives for the Transition Years more effectively.

◆ Assessment fulfils many purposes. No single assessment strategy can meet all these purposes. Schools and teachers are more likely to fulfil the broad purposes of assessment by developing and using a wide repertoire of assessment strategies.

◆ The major purposes of assessment are accountability, certification, diagnosis, and motivation. From the point of view of addressing the needs of students in the Transition Years, the most important of these are diagnosis and motivation. Whatever other needs assessment strategies fulfil, it is essential that they fulfil these.

◆ Assessment is part of the learning process, not something additional to it. Integrating new assessment strategies into curriculum and learning is one of the greatest practical and conceptual leaps to be made in assessment reform.

◆ Traditionally, assessment has been dominated by examinations, standardized tests, and teacher-made tests, all of which are, by and large, decontextualized, paper-and-pencil, and administered on completion of a unit or program of study.

◆ Traditional assessment practices tend to narrow the curriculum, constrain teaching practices and opportunities for learning, and limit students' achievement of broad educational goals.

- Traditional assessment practices generally fulfil accountability demands, only partially fulfil the purposes of certification, provide little diagnostic information, and only enhance motivation for high achievers in academic areas.

- International trends in assessment include extending assessment to non-cognitive achievements, and developing more continuous assessments that involve students, their parents, and their teachers in ongoing dialogues about progress. Developments taking place in Ontario reflect these international trends.

- Performance-based assessment establishes a close relationship between assessment and classroom tasks, linking what is tested to what is taught. It integrates assessment into the learning process, encourages teachers to emphasize the skills being tested in the tasks that they set, puts more emphasis on higher order learning, and stimulates attention to be given to a wide range of skills and achievement -- thereby increasing motivation. Performance-based assessment also improves diagnosis, by assessing students' strengths and problems in context.

- Most teachers are already aware of, and use performance-based assessment to some extent. However this kind of assessment is used more widely in some areas of the curriculum than in others, it is often recorded unsystematically; the assessment criteria are often developed by teachers alone rather than with colleagues; and teachers do not always share performance criteria with their students, making it hard for them to know how to proceed. A more structured, collegial approach to the development of performance-based assessment is called for, as is an assessment process which actively involves the student.

- Time is a commonly reported problem with developing and administering performance-based assessment. Professional-development time and other resources need to be allocated to the purpose of developing performance-based assessment. Creative use of preparation time might also be used to allow teachers to administer performance-based assessment with small groups. This would be helpful and legitimate if one of the recognized purposes of preparation time remains student evaluation, and if performance-based assessment forms part of a new balance of assessment strategies rather than being an addition to the existing assessment load. Teachers and schools also need to be careful about allocating too much time to performance-based assessment, if this begins to impinge on, and undermine teachers' other obligations to early adolescents -- particularly their capacity to care for them effectively in the slacker, looser moments of classroom life.

- Portfolios and personal records are often viewed as an alternative form of assessment. In fact, they are not themselves an assessment but provide records and evidence for assessment. Portfolios and personal records motivate less able students by giving them opportunities to declare and display things of personal worth beyond as well as within the academic domain. They also provide more complete evidence of competence and success for external publics like parents and employers. Portfolios and personal records also have limitations. They cannot be collated or summated at a group level and they are too cumbersome to be useful to many publics like employers. Portfolios and personal records probably have more value in providing a basis for continuous discussion and review of progress between students, their teachers, and their parents.

- Records of achievement are a third assessment alternative. They document, draw attention to, and stimulate a breadth of educational achievements. They increase students' self-awareness, independence, and responsibility for their own learning. They assist diagnosis and provide more detailed and constructive feedback to the student. Such records and the process of compiling them also supply teachers with information about their own teaching and are thus a spur to teacher development and curriculum development.

- Records of achievement possess the capacity to integrate assessment with learning and with the reporting system, involving students, their teachers, and their parents as partners in the continuous process of learning.

CONCLUSIONS AND IMPLICATIONS

- The tragedy of the Transition Years is not that students experience anxiety on transfer to secondary school. The tragedy is that this anxiety passes so quickly, that students adjust so smoothly to many of the uncomfortable realities of secondary school life. These realities, we have seen, can restrict achievement and depress motivation, especially among the less academic, sowing the seeds for dropout in later years.

Our review has examined the sources of students' anxiety, the nature of their adjustment, and the innovative measures that can be, and have been taken to improve learning and student growth in the Transition Years. Our review suggests that planning effective educational reform for the Transition Years involves more than establishing links between elementary and secondary school teachers, more than training teachers in new patterns of instruction. The task of meaningful and lasting reform is a profound challenge that must address the interconnectedness of school systems and the way they impact on students' experience through program, assessment, guidance, instruction, and teacher development. Change of this scope can be a minefield for the unwary who, in seeking rapid or easy solutions, may overlook the complexities of the task before them. A sense of vision, of scope, of seeing the whole picture is important here. So too is a sense of the self, of the things one holds most sacred and that must now be questioned. The elementary teacher's protectiveness of his or her own class and the secondary teacher's loyalty to, and identification with the subject -- educators must now subject these sacred norms to critical review.

◆ It is important to reaffirm that Ontario is similar in some ways and very different in others to the many locations referred to in this document. We must consider this literature within our own experience and understanding of the Ontario context. We must assess its implications carefully and critically. And we must move slowly and plan wisely in acting upon our considered judgement of the research evidence and of our professional experience.

◆ In the months and years ahead, Ontario schools and school systems must begin documenting, describing, and communicating about activities that take place as part of the Transition Years initiatives.

◆ Studies of transition to secondary school have often adopted the anthropological standpoint that students in transition are undergoing difficult but unavoidable Rites of Passage, for which they can be given help and support. These rites of passage and the ways we help adolescents undertake them are important. But we have also argued that in their early adolescence, students should have certain Rights of Passage as well. These include rights to a rounded education, rights to learning that is relevant, imaginative, and challenging, rights to have wide opportunities for achievement and success, rights to review progress periodically with someone who knows them well, and rights to feel and be cared for in their school environment. The challenge of the Transition Years is the challenge of supporting students throughout their passage.

We hope this review helps educators and all those concerned with the education and growth of our next generation to begin addressing and meeting that important challenge.

REFERENCES

ACFO. Priorités et besoins en éducation. Ottawa: ACFO, 1983.

AEF0. Rapport sur la situation des écoles secondaires de langue français en Ontario. Ottawa: AEFO (dec. 1988).

Adler, M. The Paedia Proposal: An Educational Manifesto. New York: MacMillan Publishing Co., 1982.

Ahola-Sidaway, J.A. "From Gemeinschaft To Gesellschaft: A Case Study of Student Transition From Elementary School to High School". Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, Louisiana. ERIC Document ED 297450, 1988.

Alexander, K.A.; Cook, M.; and McDill, E.L. "Curriculum Tracking and Educational Stratification: Some Further Evidence". American Sociological Review 43 (1978), pp. 47-66.

Alexander, K.L., and Pallas, A.M. "Curriculum Reform and School Performance: An Evaluation of the New Basics". Johns Hopkins University Report 347 (46) (1983).

Allan, J., and Dyck, P. "Transition: Childhood to Adolescence". Elementary School Guidance and Counselling, 81 (4) (1984), pp. 277-286.

Allen, M.G. Vermont-New Hampshire Middle Grades Survey: A Report. ERIC Document ED 198089, 1980.

American Federation of Teachers. A National Design for the Middle School. Washington, D.C.: American Federation of Teachers. ERIC Document ED 083199, 1973.

Anderson, H.O. "What's That You Said?" Hoosier Science Teacher 7(3) (1982), pp. 78-84.

Anderson, J.O. "Evaluation of Student Achievement: Teacher Practices and Educational Measurement". The Alberta Journal of Educational Research XXXV (1989), pp. 123-133.

Arnau, J., and Boada, H. "Languages and School in Catolonia", Journal of Multilingual and Multicultural Development 7(2-3) (1986), pp. 187-222.

Ascher, C. The Ninth Grade -- A Precarious Time for the Potential Dropout. New York: Eric Clearinghouse on Urban Education. ERIC Document ED 284922, 1987.

Ashton, P., and Webb, R. Making a Difference: Teachers' Sense of Efficacy and Student Achievement. New York: Longman, 1986.

Association of Universities and Colleges of Canada. "Money May Itself Have Become a Philosophy of Life For Students". University Affairs, (October 1982), p.27.

Atkinson, P., and Delamont, S. "Mock Ups and Cock Ups: The Stage Management of Guided Discovery". In Hammersley, M., and Woods, P. School Experience. London: Croom Helm, 1977.

Babcock, E.H.; Daniels, D.B.; Islip, J.; Razzell, A.G.; and Ross, A.M. Education in The Middle Years. London: Evans/Methuen Educational, 1972.

Bailey, T., and Dinham, H. "Establishing An On-Site Unit For Secondary Pupils Who Are Considered To Be Disruptive in Schools". Support for Learning 2(1) (1987), pp. 41-47.

Baker, C. "Normative Testing and Bilingual Populations". Journal of Multilingual and Multicultural Development 9(5) (1988), pp. 399-409.

________. Aspects of Bilingualism in Wales. Clevdon, England: Multilingual Matters, 1985.

Baker, S.B., et al. "Effects of Cognitive Restructuring and Structured Group Discussions as Primary Prevention Strategies". School Counsellor 31(1) (1983), pp. 26-33.

Baldwin, J., and Wells, H. Active Tutorial Work. Oxford: Basil Blackwell, 1981.

Ball, S. "A Subject of Privilege: English and the School Curriculum: 1906-35". In Hammersley, M., and Hargreaves, A., Curriculum Practice: Some Sociological Case Studies. New York and Philadelphia: Falmer Press, 1983.

________. Beachside Comprehensive, Cambridge: Cambridge University Press, 1980.

Banaghan, B. Inside EUREKA: The California Career Information System. Concord, California: Diablo Valley College, 1983.

Bantock, G. Dilemmas of the Curriculum. Oxford: Martin Robertson, 1980.

Barker-Lunn, J. Streaming in the Primary School. Slough: NFER., 1970.

Barrow, R. The Canadian Curriculum: A Personal View. London (Ontario): Faculty of Education, University of Western Ontario, 1979.

Bassey, M. Nine Hundred Primary School Teachers. Slough: NFER, 1978.

Bayefsky, A., and Eberts, M. Equality, Rights and The Canadian Charter of Rights and Freedoms. Toronto: Carswell, 1985.

Beaton, J.; Both, S.; Fine, J.; and Hember, D. The Peel Board of Education Science Review. Report PGSCIECE/4436. Peel Board of Education, 1988.

Beaudoin, M., et al. "Bilingual Education: A Comparison of Welsh and Canadian Experiences". Canadian Modern Language Review, 37(3) (1981), pp. 498-509.

Becker, H.J. Addressing the Needs of Different Groups of Early Adolescents: Effects of Varying Social Backgrounds and Abilities. Baltimore: Center for Research on Elementary and Middle Schools. ERIC Document ED 291506, 1987.

Becker H.S.; Geer B.; and Hughes E. Making the Grade. New York: John Wiley and Sons Inc., 1968.

Bêlanger, M.; Mougeon, M.; St-Pierre, F.; et Canale, M. "Programmes dans les écoles élémentaires de langue française pour les élèves de compétence inégale en français". Dans Actes du 5e congrès de l'AOPF, 3-5 avril, Toronto. Sudbury: Institute franco-ontarien, Collection Fleur-de-trille, 1986.

Benander, D.H. A "Conceptual" Middle School: Freeing The Program From The Building. ERIC Document ED 241489, 1982.

Béniak, E.; Carey, S.; et Mougeon, R. "A sociolinguistic and ethnographic approach to Albertan French and its implications for French-as-a-first-language pedagogy". The Canadian Modern Language Review 41(2) (1984), pp. 308-314.

Béniak, E.; Mougeon, R; and Valois, D. Contact des langues et changement linguistique: étude sociolinguistique du français parlé à Welland (Ontario). Québec: Centre International de Recherche sur le Bilinguisme, 1985.

Bennet, N. Teaching Styles and Pupil Progress. London: Open Books, 1976.

Berlak, A., and Berlak, H. Dilemmas of Schooling. London: Methuen, 1981.

Bernstein, B. (1971). "On the Classification and Framing of Educational Knowledge". In Young, M.F.D. (ed). Knowledge and Control. New York: Collier-MacMillan, 1971.

Blackburn, K. The Tutor. London: Heinemann, 1975.

Bloom, B. "Learning for Mastery". In Bloom, B.S.; Hasting, J.T.; and Madaus, G.F. Handbook on Formative and Summative Evaluation of Student Learning. New York, McGraw Hill, 1971.

________. "Toward A Theory Of Testing Which Includes Measurement-Evaluation-Assessment". In Wittrock, M.C., and Wiley D. W., (eds). The Evaluation of Instruction. New York: Holt, Rinehart and Winston, 1970.

Bloomer, J.M. "Conquering The New Frontier". NASSP Bulletin, 70(487) (1986), pp. 95-96.

Board of Education. Report of the Consultative Committee on Examinations in Secondary Schools. Cd 6004. London, England: HMSO 1911.

Board of Education for the City of Etobicoke. Making The Grade: Evaluating And Reporting Student Progress. Etobicoke, Ont., 1985.

Bolam, R., and Medlock, P. Active Tutorial Work: Training and Dissemination -- An Evaluation. Oxford: Basil Blackwell, 1985 .

Book, C., and Freeman, D.J. "Differences in Entry Characteristics of Elementary and Secondary Teacher Candidates". Journal of Teacher Education, 37(2) (1986), pp. 47-51.

Bourdieu, P., and Passeron, J. Reproduction in Education, Society and Culture. London: Sage Publications, 1977.

Boyd, W., and Crowson, R. "The Changing Conception and Practice of Public School Administration". Review of Research in Education 9 (1982), pp. 311-373.

Boyer, E. High School: A Report On Secondary Education In America. New York: Harper and Row, 1983.

Braddock, J.H., et al. School Organization in the Middle Grades: National Variations and Effects. Baltimore: Center for Research on Elementary and Middle Schools. ERIC Document ED 301320, 1988.

British Columbia Ministry of Education, Year 2000: A Curriculum and Assessment Framework for the Future, Victoria, 1989.

Broadfoot, P. "Alternatives to Public Examinations". In Nuttall, D. (ed.). Assessing Educational Achievement. London: The Falmer Press, 1986.

___________. "From Public Examinations to Profile Assessment -- The French Experience". In P. Broadfoot (ed.) Selection, Certification and Control. London: The Falmer Press, 1984.

___________. Assessment, Schools and Society. London: Methuen, 1979.

Broadfoot, P.; James, M.; McMeeking, S.; Nuttall, D.; and Stierer, B. Records of Achievement: Report Of The National Evaluation Of Pilot Schemes. London: HMSO, 1988.

Brophy, J.E. "How Teachers Influence What Is Taught And Learned In Classrooms". Elementary School Journal, 83(1) (1982), pp. 1-13.

Brophy, J., and Good, T. Teacher-Student Relationships: Causes and Consequences. New York: Holt Rinehart and Winston, Inc., 1974.

Brown, B. Crisis In Secondary Education: Rebuilding America's High Schools. New Jersey: Prentice Hall, 1984.

_______. The Reform Of Secondary Education: A Report To The Public And The Profession. New York: McGraw-Hill, 1973.

Bruene, L., et al. "Training Students In Thinking Skills For Solving Social Problems: A Strategy For Helping Students Cope Constructively With School Stressors". Paper presented at the Annual Meeting of the American Educational Research Association. ERIC Document ED 257017, 1985.

Bulson, T. Bridging the Gap. Aurora, Ontario: York Region Board of Education, 1984.

Burgess, T., and Adams, E. Records of Achievement. Windsor: NFER-Nelson, 1985.

Burke, A.M. Making a Big School Smaller: The School-Within-a-School Arrangement for Middle Level Schools. Orting WA: Orting Middle Schools. ERIC Document ED 303890, 1987.

Butler, K.A. Learning and Teaching Styles in Theory and Practice. Maynard, Mass.: Gabriel Systems, Inc., 1984.

Butt, R.L. "The Transitional Curriculum". Educational Leadership 39(2) (1981), pp. 117-119.

Button, L. Group Tutoring for the Form Teacher. 1. Lower Secondary School; 2. Upper Secondary School. London: Hodder and Stoughton, 1. 1981; 2. 1982.

Campbell, R.J. Developing the Primary Curriculum. London: Holt, Rinehart and Winston, 1985.

Canadian Teachers' Federation. Province Wide Student Assessment Programs. Ottawa, 1982.

Canale, M. "A communicative approach to language proficiency assessment in a minority setting". Communicative competence approaches to language proficiency assessment: Research and application. Clevedon, England: Multilingual Matters, 1984.

Canale, M.; Frenette, N.; et Skitri, R. Rapport sur le projet de loi 82: Problèmes linguistiques en milieu minoritaire franco-ontarien. Toronto: OISE, 1983.

Canale, M.; Mougeon, R.; Heller, M.; Belanger, M., Programmes dans les écoles élémentaires de lange française pour les élèves de compétence inégal en français. Toronto: Ministère de l' Education, 1987.

Carroll, J. "The Copernican Plan: Restructuring the American High School". Phi Delta Kappan, 71(3) (1990).

Carter, L. "The Sustaining Effects of Study of Compensatory and Elementary Education". Education Research 13 (1984), pp. 4-13.

Cazabon, R., et Frenette, N. Le français parlé en situation minoritaire, Vol. 2. Québec: Centre Internationale de recherche sur le bilinguisme, 1982.

Chamot, A.U., and O'Malley, J.M. "The Cognitive Academic Language Learning Approach: A Bridge to the Mainstream". TESOL Quarterly, 21(2) (1987), pp. 227-49.

Chellew, L.G.; Baker, C.; Baker, R.; Dimitri, O. and Johnson, M. The Intermediate School Study. Toronto: Ontario Institute for Studies in Education, 1973.

Cheng, M.L., and Ziegler, S. Moving from Elementary to Secondary School: Procedures Which May Facilitate the Transition Process. Toronto: Toronto Board of Education, 1986.

Churchill, S. Education of Linguistic and Cultural Minorities in the OECD Countries. Clevdon, England: Multilingual Matters, 1986.

Churchill, S.; Frenette, N.; and Hanna, G. La classe et son environnement dans les écoles franco-ontariennes. Toronto: Ministère de l' Education (sans date).

Churchill, S.; Frenette, N.; and Quazi, S. Éducation et besoins des Franco-Ontariens: Le diagnostic d'un système d'éducation. Toronto: Le Conseil de l'éducation franco-ontarienne, 1985.

Cicourel, A.V., and Kitsuse, J.F. The Educational Decision Makers. New York: Bobbs-Merrill, 1963.

Cohen, M., and Shapiro, R. Report of the High School Articulation Project. Brooklyn, N.Y.: New York City Board of Education, Office of Educational Evaluation. ERIC Document ED 182377, 1979.

Cohn, M. "Building Homes, Building Careers". Vocational Education Journal 62(2) (1987), pp. 34-37.

Connecticut State Board of Education. Connecticut's Common Core of Learning Connecticut, 1987.

Connell, R.W. Teacher's Work. London: Allen and Unwin, 1985.

Connell, R.; Ashenden, D.J.; Dessler, S.; and Dowsett, G.W. Making the Difference. Boston: Allen and Unwin, 1982.

Cooper, B. Renegotiating Secondary School Mathematics. New York and Philadelphia: Falmer Press, 1985.

Corbett, H.; Dickson, R.; Firestone, W.; and Rossman, G. "Resistance To Planned Change and the Sacred in School Cultures". Educational Administration Quarterly 23(4) (1987), pp. 36-59.

Corcoran, B.T. Competency Testing and At-Risk Youth. Research for Better Schools, 1985.

Cortes, C.E. "Multicultural Education: Preparing Young People for Life in an Integrated Nation and an Integrated World". Speech delivered at the Conference on "From Desegregated Schools to Integrated Education", Milwaukee, WI, July 11, 1979. ERIC Document ED 220547, 1979.

Costar, J.W. Focus on Improving Your Middle School Guidance Program. East Lansing, MI.: Michigan Association of Middle School Educators. ERIC Document ED 299532, 1988.

Cotton, K. Effects of Interdisciplinary Team Teaching: Research Synthesis. Portland, Oregon: Northwest Regional Educational Laboratory. ERIC Document ED 230533, 1982.

Courte, B. "Coopération et découverte. Un vidéo préparé par le CRÉFO". Orbit (October, 1989).

________. "L'excellence pédagogique: ça se vit aussi en français". Orbit (December, 1989), p. 11.

Crawford, P. Closing Small Schools: The Parents' Perspective Two Years Later. Toronto: Ontario Government Publications Services and North York Board of Education, 1983.

Creemers, B.P.M., and Scheerens, J. "Developments in Middle School Education in Western Europe". International Journal of Education Research 12(5) (1988), pp. 453-574.

Cremin, L. The Transformation Of The School. New York: Teachers College Press, 1961.

Crespo, M. "Reformer l'école". McGill Journal of Education 15(2) (Spring 1980), pp. 200-212.

Crockenberg, S.B., and Bryant, B.K. "Socialization: The Implicit Curriculum of Learning Environments". Journal of Research and Development in Education 21(1) (1978), pp. 69-78.

Croll, P.; Moses, D.; and Wright, J. "Children With Learning Difficulties and Assessment in the Junior Classroom". In P. Broadfoot (ed.), Selection, Certification and Control. Lewes: The Falmer Press, 1984.

Crooks, T. "The Impact of Classroom Evaluation Practices on Students". Review of Educational Research 58 (1988).

Cuban, L.J. "The 'At-Risk' Label and the Problem of Urban School Reform". Phi Delta Kappan 70(10) (1989).

__________. How Teachers Taught: Constancy and Change in American Classrooms 1890-1980. New York: Longman, 1984.

Cummins, J., Bilingualism and Special Education. Clevedon, Avon, G.B.: Multilingual Matters, 1984.

Cunningham, D. "Transition In Languages Other Than English From Primary to Postprimary Schools". Babel 21(3) (1986), pp. 13-19.

Cunningham, M.E. Core Curriculum in a Multicultural School: Strategies for Multicultural Education in the Middle School. Mexico. ERIC Document ED 184780, 1979.

Curtis, B. Building the Educational State: Canada West. New York and Philadelphia: Falmer Press, 1988.

D'C[illegible]rio, W.D. "Test Scores in New Castle County, DE, Before and After Busing". American School Board Journal 62(8) (1982), pp. 28-32.

Davis, J. The Small School. Department of Educational Administration, OISE, 1988.

Davis, S.J. "Using Multiple Criteria to Place Middle School Children". Journal of Reading 32(8), (1989).

Dayton, C., and Reller, D. "A Training Partnership of High-Risk Youth". Vocational Education Journal 63(3) (1987), pp. 34-37.

Dean, J. "The Gifted Child in the Ordinary Classroom". Gifted Education International, 1(1) (1982), pp. 26-29.

Delamont, and Galton, M. "Pupil Anxiety and Transfer to Middle School". in Hargreaves, A. and Tickle, L. Middle Schools" Origins, Ideology and Practice, Harper and Row, 1980.

Deller, D.K. A Model for Improving Parent Orientation to the Middle Schools. Ed. D. Practicum Report. Florida, Nova University. ERIC Document ED 202083, 1980.

Department of Education. What Works: Research About Teaching and Learning. Washington, DC., 1987.

Department of Education and Science. Records of Achievement: A Statement of Policy. London: HMSO, 1984.

Department of Education and Science. Teaching Quality. London: HMSO, 1983.

Derricott, R. Curriculum Continuity: Primary to Secondary. Philadelphia: NFER-Nelson, 1985.

Derricott, R., and Richards, C. "The Middle School Curriculum: Some Uncharted Territory". In Hargreaves, A., and Tickle, L. Middle Schools: Origins, Ideology and Practice. London: Harper and Row, 1980.

Desjarlais, L. L'influence du milieu sociolinguistique sur les élèves franco-ontariens. Toronto: Ministère de l'Éducation, 1983.

Deutsch, M. "Education and Distributive Justice: Some Reflections on Grading Systems". American Psychologist 34 (1979), pp. 391-401.

Dodd, A.W. "A New Design for Public Education". Phi Delta Kappan 65(10) (1984), pp. 685-687.

Doornbos, K. "The Innovation of Primary Education (4-12) in the Netherlands: An Overview and Some Historical Remarks". Pedagogische Studien 62(4) (1985), pp. 159-173.

__________. "Towards Renewal of Primary Education in the Netherlands: An Analysis of the Initial Stages (1960-1980)". Pedagogische Studien 62(2) (1985), pp. 71-84.

Dore, R. The Diploma Disease. London: Allen and Unwin, 1976.

Draud, J.E. "Curriculum Considerations for Developing a Model Middle School". Speech presented at the Annual Convention of the National Association of Secondary School Principals. Washington, D.C. ERIC Document ED 119381, 1976.

Duckenfield, M. "Are Good Marks Worth Getting?" Times Educational Supplement, 68 (1977).

Dunn, J.A. Career Education Curriculum Development: Grade K-9. American Institute for Research in the Behaviourial Sciences, 1974.

Dunn, R. and Dunn, K. "Teaching Students Through Their Individual Learning Styles: A Research Report". Student Learning Styles and Brain Behaviour. Reston, Va.: NASSP, 1982.

Durkheim, E. Education and Sociology. New York: Free Press, 1956.

Earl, L.M. CRDI Needs Assessment: Focused Interviews with Secondary Curriculum Management Teams. Research Report 89/90-01. Scarborough Board of Education, 1989a.

_________. "Beyond Paper and Pencil Tests: Alternative Methods of Student Evaluation". Research Speaks to Teachers 24 (1989b), Scarborough Board of Education.

__________. Organization of Schools for Intermediate Students: Literature Review. Research Report 87-18. London, Ontario: The Board of Education for the City of London, 1987.

Earl, L.M. et al., Streaming: Interpreting The Literature. Scarborough Board of Education, 1989.

Ebel, R. L. "Evaluation of Students: Implications for Effective Teaching". Educational Evaluation and Policy Analysis 2 (1) (1980), pp. 47-51.

Edelstein, W. "Curriculum Reform in Iceland: An Integrated Approach to Educational Innovation". Scandinavian Journal of Educational Research 19(1) (1975), pp. 13-26.

Edwards, D. "Welsh-Medium Education". Journal of Multilingual and Multicultural Development, 2(3-4) (1988), pp. 247-257.

Egan, K. Teaching as Storytelling. London: Routledge, 1988.

Eichhorn, D.H. "Middle School --.Promise of the Future". Paper presented at Southeast Missouri State College. ERIC Document ED 033444, 1969.

____________. "Planning Programs for Transescents". Paper presented at the University of New York at Buffalo. ERIC Document ED 033445, 1968.

Eisenberg, S. "Exploring the Future: A Counselling/Curriculum Project". Personnel and Guidance Journal 52(8) (1974), pp. 527-533.

Elkind, D. "Humanizing the Curriculum". Childhood Education 53(4) (1977), pp. 179-185.

Entwistle, N. Styles of Learning and Teaching. Chichester: John Wiley, 1981.

Epstein, J.L. "What Matters in the Middle Grades" -- Grade Span or Practices? Phi Delta Kappan 71(3) (1990).

___________. Schools In the Center: Schools, Family, Peer and Community. Connections for More Effective Middle Grade Schools and Students. Baltimore, MD: Johns Hopkins University Center for Research on Elementary and Middle Schools, 1988.

Epstein, M.H., and Cullinan, D. "Effective Social Skills Curricula For Behaviourial Disordered Students". Pointer 31(2) (1987), pp. 21-24.

Esposito, D. "Homogeneous and Heterogeneous Ability Grouping: Principal Findings and Implications for Evaluating and Designing More Effective Educational Environments". Review of Educational Research 43 (1973), pp. 163-179.

Etzioni, A. An Immodest Agenda: Rebuilding America. New York: McGraw Hill, 1982.

Evans, M.J. "From School to School: The Integration into the Secondary School of Pupils in the Transition from Primary to Secondary Schooling". Paper presented at the National Conference of the Australian Association for Research in Education, Canberra, November 1983.

Farmer, E. "Current Issues in Pupil Transportation". School Business Affairs 50 (1984), pp. 20-21.

Fenwick, J.J. Caught in the Middle: Educational Reform for Young Adolescents in California Public Schools. Sacramento: California State Dept. of Education. Bureau of Adult Education. ERIC Document ED 289246, 1987.

Findley, W., and Bryan, M. "The Pros and Cons of Ability Grouping". PDK Fastback Series 66 (1975).

Fine, M. "Why Urban Adolescents Drop Into and Out of Public High Schools". Teachers College Record 87 (3) (1986).

Firestone, W., and Rosenblum, S. "First Year Project: A Study of Alienation and Commitment in Five Urban Districts". Paper presented at the American Educational Research Association, Washington, DC (1987).

Ford, F. Beginning Again: A Study of Post-Secondary Student Transition in a Victorian Catholic Schools Network During 1982 and 1983. Australia: Master of Educational Studies Thesis, Monash University, 1985.

Frenette, N. Les parents et le choix d'une école secondaire de langue française. Toronto: CREFO, 1984.

__________. "Les besoins de l'éducation en situation minoritaire". Échange 16(3) (Automne, 1988).

__________. "Minority Language Education". Paper presented at the conference "The French Experience in North America," University of Maine at Orono, August, 10, 1981a.

__________. Minority Language Education: The Ontario Experience. Toronto: Ministry of Education, 1981b.

__________. Enquête sur les besoins des enseignantes et des enseignants franco-ontariens en matière formation initiale et continue. Toronto: CREFO, 1987.

Frenette, N.; Churchill, S.; and Quazi, S. Les écoles franco-ontariennes et la préparation aux études postsecondaires". Revue du Nouvel-Ontario 7(1) (1985), pp. 91-108.

Frenette, N.; Davesne, D.; and Larouche, C. L'enseignement efficace: en vue de la formation continue des enseignants. Toronto: OISE, 1988.

Frenette, N., and Gauthier, L. "Luttes idéologiques et cultures institutionnelles en éducation minoritaire: les cas de l'Ontario français". A paraître dan La Revue Éducation canadienne et internationale, 1990.

Freund, P. The Transition from Primary to Secondary School: An Investigation of the Procedures of Transfer and Induction at Eleven Years. Unpublished diploma dissertation, University of Oxford, Department of Educational Studies, 1985.

Fullan, M. The Meaning of Educational Change. Revised edition. Toronto: OISE Press, forthcoming.

________. The Meaning of Educational Change. Toronto: OISE Press, 1982.
Fullan, M.; Anderson, S.; and Newton, E. Support Systems for Implementing Curriculum in School Boards. Report to the Ontario Ministry of Education. Toronto: Ontario Institute for Studies in Education, 1986.

Fullan, M., and Connelly, F.M. Teacher Education in Ontario: Current Practice and Options for the Future. Position Paper. Toronto: Ministry of Education, 1987.

Fullan, M., and Hargreaves, A. What's Worth Fighting For In Your School. Toronto: Ontario Public School Teacher's Federation, in press.

Further Education Curriculum. Profiles: A Review of Issues and Practice in the Use and Development of Student Profiles. London: HMSO, 1982.

Gaddes, W. H. Learning Disabilities and Brain Function. New York: Springer-Verlag, 1980.

Galton, M. "An Oracle Chronicle: A Decade of Classroom Research". Teaching and Teacher Education 3(4), 1987.

Galton, M.; Simon, B.; and Croll, P. Inside the Primary Classroom. London: Routledge and Kegan Paul, 1980.

Galton, M., and Willcocks, J. Moving from the Primary Classroom. London: Routledge and Kegan Paul, 1983.

Gardner, H. Frames of Mind: The Theory of Multiple Intelligences, New York: Basic Books, 1983.

Garnett, K. "Some of the Problems Children Encounter in Learning a School's Hidden Curriculum". Journal of Reading, Writing, and Learning Disabilities International 1(1) (1984), pp. 5-10.

Garton, A.F. "Specific Aspects of the Transition from Primary School to High School". Australian Educational and Developmental Psychologist 4(1) (1987), pp. 11-16.

Gayle, D., et al. "Improving Schools for Young Adolescents". Educational Leadership 42(6) (1985), pp. 44-49.

Gedge, J. "The Hegemonic Curriculum and School Dropout: The Newfoundland Case", Journal of Education Policy, in press.

George, N.L. "Transporting Behavioural Disordered Adolescents: A Descriptive Analysis". Behaviourial Disorders 12(3) (1987), pp. 185-192.

George, P.S., and Oldaker, L.L. Evidence for the Middle School. Columbus, Ohio: National Middle School Association, 1985.

Georgiady, N.P., and Romano, L.G. "Growth Characteristics of Middle School Children: Curriculum Implications". Middle School Journal 8(1) (1977), pp. 12-15, 22-23.

Gilligan, C. Making Connections: The Relational Worlds of Adolescent Girls at Emma Willard School. Reviewed in Toronto Star. (1990, January 16). pp. B1, B4.

__________. In a Different Voice: Psychological Theory and Women's Development. Cambridge: Harvard University Press, 1982.
Ginsburg, M.B.; Meyenn, R.J.; Miller, H.D.R.; and Ranceford-Hadley, C. The Role of the Middle School Teacher. Aston Educational Monograph No. 7. Birmingham: University of Aston, 1977.

Glasser, K. "When Students Fail, Board Members Can Probe The Problem One Kid At A Time". The American School Board Journal, (March 1988), pp. 31-33.

Goodall, J. "Leap into the Unknown or All in Their Stride?: Transition-Years Six to Seven". English in Australia 56 (1981), pp. 34-40.

Goodlad, J.I. "A New Look At An Old Idea: Core Curriculum". Educational Leadership 44(4) (1987), pp. 8-16.

__________. A Place Called School: Prospects For The Future. New York: McGraw-Hill, 1984.

Goodson, I.F. "Sponsoring the Teachers Voice" In Hargreaves, A., and Fullan, M., Understanding Teacher Development. New York: Teachers' College Press, in press.

__________. The Making of Curriculum. New York: Falmer Press, 1988.

__________. School Subjects and Curriculum Change. London: Croom Helm, 1982.

Goodson, I.F., and Ball, S. (eds). Defining the Curriculum. New York and Philadelphia: Falmer Press, 1985.

Gorwood, B. School Transfer and Curriculum Continuity. New Hampshire: Croom Helm, 1986.

Gottfredson, D.C. "Environmental Change Strategies to Prevent School Disruption". Paper presented at the Annual Meeting of the American Psychological Association, Toronto, 1984. ERIC Document ED 250805, 1984.

Gould, C. Career Education Management Activity Guide. Augusta, ME: Maine State Department of Educational and Cultural Services. Office of Career Education. ERIC Document ED 215099, 1981.

Government of British Columbia. Year 2000: A Curriculum and Assessment Framework for the Future. Victoria, British Columbia Ministry of Education, 1989.

Government of Newfoundland and Labrador. Towards an Achieving Society. Task Force on Mathematics and Science Education, 1989.

Government of Ontario. Select Committee Report on Education. Toronto, 1988.

Graham, D. "Curriculum Rediscovered". Education 172(3) (1988), pp. 57-59.

Gray, J.; McPherson, A.F.; and Raffe, D. Reconstructions of Secondary Education. London: Routledge and Kegan Paul, 1983.

Great Britain Department of Education and Science. Education Reform Act. London: HMSO, 1988.

Green, K.E., and Williams, E.J. "Standardized Test Use By Classroom Teachers: Effects of Training and Grade Level Taught". Paper presented at the Annual Meeting of the National Council of Measurement in Education, San Francisco, CA., March 1989. ERIC Document ED 306252, 1989.

Green, K.R., and Baker, A. Promising Practices for High Risk Youth in the Northwest Region: Initial Search. Portland: Northwest Regional Educational Lab. ERIC Document ED 271660, 1986.

Greenberg, A., and Hunter, A. "Striving for Excellence: Middle Schoolers Study 'Work'" Ideas for Action in Education and Work Issue 5 (1982).

Greene, M. "Jeremiad and the Curriculum: The Haunting of the Secondary School". Curriculum Inquiry 15(3) (1985).

Gregorc, A.F. ORGANON: Theory Manual. Working Paper. The University of Connecticut. School of Education, 1979.

Griffiths, D.E. "Beyond the Basics". New York University Education Quarterly 12(1) (1980), pp. 2-6.

Gullickson, A.R. "Teacher Perspectives of Their Instructional Use of Tests". Journal of Educational Research 77 (1984), pp. 244-248.

______________. "The Practice of Testing in Elementary and Secondary Schools". Unpublished Report. ED229391, 1982.

Guthrie, G. "Current Research in Developing Countries: The Impact of Curriculum Reform on Teaching". Teacher Education 2(1) (1986), pp.81-89.

Haase, S.E. "Thoughts On An Integrated Approach to Curriculum". Journal of American Indian Education 20(3) (1981), pp. 32-33.

Hagan, J. M. "Forum: Busing is Beautiful". Teacher, 92(3) (1979).

Hall, E., and Dennis, L. Living and Learning. Toronto: Ontario Ministry of Education, 1968.

Hamblin, D. The Teacher and Pastoral Care. Oxford: Basil Blackwell, 1978.

Hammersley, M., and Scarth, J. The Impact of Examinations on Secondary School Teaching. Final Research Report, School of Education. Milton Keyner: Open University, 1986.

Hannigan, I. "Core-Explore-More: A Structure for Planning Enrichment Activities". Roeper Review 6(3) (1984), pp. 142-144.

Hargreaves, A. "Cultures of Teaching". In Goodson, I. Studying Teachers' Lives. London: Kegan Paul, 1990a.

____________. "Individualism and Individuality: Reinterpreting the Teacher Culture". International Journal of Educational Research (forthcoming) 1990b.

__________. Curriculum and Assessment Reform. Toronto: OISE Press, 1989.

__________. Two Cultures of Schooling: The Case of Middle Schools. Lewes: Falmer Press, 1986.

__________. "Progressivism and Pupil Autonomy". Sociological Review 25 (1977), p. 3.

Hargreaves, A.; Baglin, E.; Henderson, P.; Leeson, P.; and Tossell, T. Personal and Social Education: Choices and Challenges. Oxford: Basil Blackwell, 1988.

Hargreaves, A., and Dawe, R. "Paths of Professional Development: Contrived Collegiality, Collaborative Culture and the Case of Peer Coaching" Teaching and Teacher Education 4, (1990) p. 3. (forthcoming).

Hargreaves, A., and Tickle, L. Middle Schools: Origins, Ideology and Practice. London: Harper and Row, 1980.

Hargreaves, A., and Wignall, R. "Time for the Teacher: a Study of Collegial Relations and Preparation Time Use Among Elementary School Teachers". Transfer Grant Project 51/1070. Toronto: Ontario Institute for Studies in Education, 1989.

Hargreaves, D. The Challenge for the Comprehensive School: Culture, Curriculum and Community. London: Routledge and Kegan Paul, 1982.

Hargreaves, D. Social Relations in a Secondary School. London: Routledge and Kegan Paul, 1967.

Hart, L. "Learning Styles and Student Need: "An introduction to Conceptional Level". Student Learning Styles and Brain Behaviour. NASSP, 1979.

Hawking, S. A Brief History of Time. New York: Bantam Books, 1988.

Hawkins, J.A., et al. Grade Organization Patterns in Schools: A Review of the Research. Rockville, MD: Montgomery County Public Schools, 1983.

Heller, M. "Franco-Ontarian education and ethnic boundaries: current issues in ethnic mobilization". Paper presented at the Canadian Ethnic Studies, Biennial, Calgary, pp. 18-21, October, 1989.

________. "Les pratiques langagières et les résaux sociaux dans les écoles de langue français en Ontario". À paraître dans Actes du colloque "Regard sur le jeune Franco-Ontarien." Ottawa: Faculté d'Éducation, Université d'Ottawa, 1989.

________. "Franco-Ontarian Education: Politics and Practice". Paper presented at the 30th Annual Reunion of the Comparative and International Education Society, Toronto, March 13-16, 1986.

Heller, M. St-Pierre, F.; et Courte, B. Les besoins en matériel didactique dans les écoles françaises de l'Ontario, Toronto: CREFO, 1988.

Her Majesty's Inspectorate. Curriculum 11-16: Towards a Statement of Entitlement. London: HMSO, 1983.

__________. Aspects of Secondary Education in England: A Survey by H.M. Inspectors. London: HMSO, 1979.

__________. Curriculum 11-16: Working Papers by H.M. Inspectorate. London: HMSO, 1987a.

__________. Primary Education in England: A Survey by H.M. Inspectorate of Schools. London: HMSO, 1987b.

Herman, J., and Dorr-Bremme, D.W. Testing and Assessment in American Public Schools: Current Practices and Directions for Improvement. Los Angeles: Center for the Study of Evaluation, University of California at Los Angeles, 1984.

Hirst, P. Knowledge and the Curriculum. London Routledge and Kegan Paul, 1975.

Holmes, M. "Putting Students to the Test". Toronto: Globe and Mail, May 3, 1984.

Holt, M. The Common Curriculum. London: Routledge and Kegan Paul, 1978.

Hout, M., and Garnier, M.A. "Curriculum Placement and Educational Stratification in France". Sociology of Education 52(3) (1979), pp. 146-156.

Howell, J.F. "Walking or Riding: Does it Make a Difference in Black Student Achievement?" Journal of Education Equity and Leadership 2(2) (1983), pp. 127-133.

Huberman, M. "Teacher Development and Instructional Mastery". In Hargreaves, A., and Fullan, M., Understanding Teacher Development. New York: Teachers' College Press, in press.

Hunt, David E. Beginning with Ourselves: In Practice, Theory and Human Affairs. Cambridge, MA: Brookline Books; Toronto: OISE Press, 1987.

Hunt, J.A. "Education and Bilingualism on the French-Dutch Language Boundary in Belgium". Journal of Multilingual and Multicultural Development, 8(3) (1987), pp. 261-282.

Iacuzio, A.A. Development and Implementation of an Articulation Model for Identified Entering Freshmen with School Adjustment Problems. Ed.D. Dissertation, Nova University, FL. ERIC Document ED 185476, 1979.

Ianni, F.A.J. "Providing a Structure for Adolescent Development". Phi Delta Kappan 70(69) (1989).

Illinois State Board of Education (ISBE). Implementing Vocational Education in the Schools: An Alternative Curriculum. Springfield: Illinois State Board of Education, Department of Adult, Vocational and Technical Education, 1984.

Inner London Education Authority (ILEA). Improving Secondary School Transfer. London: Inner London Education Authority, 1988.

Inner London Education Authority. Improving Secondary Schools. London: Inner London Education Authority, 1984.

Iowa State Department of Education. Preparing Students for the 21st Century. Des Moines Division of Instructional Services. Career Education Handbook. ERIC Document ED 280958, 1986.

Jackson, C.E. The Middle School Curriculum: A General Examination. ERIC Document ED 278101, 1986.

Jackson, O.A. The Middle School Study: A Review of Priorities for Education in Grades 6,7, and 8. Hamilton, Ontario: Research Services Department, Hamilton Board of Education, 1988.

Jackson, P. The Practice of Teaching, New York: Teachers' College Press, 1988.

Jacobs, H., and Borland, J.H. "The Interdisciplinary Model: Theory and Practice". Gifted Child Quarterly 30(4) (1986), pp. 159-163.

Jones, C.A. Development and Implementation of a Pilot Middle School Guidance Program. Nova University, Florida. Ed.D. Dissertation, Nova University, FL. ERIC Document ED 186809, 1979.

Jones, R. B. "Wales: A Case of Identity". Comparative Education, 19(2) (1983), pp. 155-160.

Karp, E. The Dropout Phenomenon in Ontario Secondary Schools: A Report to the Ontario Study of the Relevance of Education and the Issue of Dropouts. Toronto: The Queen's Printer for Ontario, 1988.

Kearns, J. "Self-Esteem: A Place To Begin'. In The Middle: Journal of the Saskatchewan Middle Years Association 8(2) (1990), pp. 4-5.

Kefford, R. "From Narratives to Note Taking: Differential Demands in Writing Tasks Year Six to Year Seven". English in Australia 58 (1981), pp. 36-41.

Kenney, A.M. "Teen Pregnancy: An Issue For Schools". Phi Delta Kappan 68(10) (1987).

Kfir, D. "Slow Learners in Junior High School". Israeli Journal of Psychology and Counselling in Education 16 (1983), pp. 167-175.

Khlief, B. "Language as Identity: Toward an Ethnography of Welsh Nationalism". Ethnicity, 6(4) (1979), pp. 346-357.

King, A. The Adolescent Experience. Toronto: The Research Committee of the Ontario Secondary School Teachers' Federation, 1986.

King, A.; Warren, W.; Michalski, C.; and Peart, M. Improving Student Retention in Ontario Secondary Schools. Toronto: Ontario Ministry of Education, 1988.

Knight, T. (ed). Inservice Education with Primary Schools. La Trobe University School of Education (Series in primary school innovation). ISBN 0858165406, 1984.

Kritek, W.J. "School Culture and School Improvement". Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, April 1986. ERIC Document ED 27783, 1986.

Kulik, C., and Kulik, J. "Effects of Ability Grouping on Secondary School Students: A Meta-analysis of Evaluation Findings". American Educational Research Journal 19 (1982).

Kulik, J., and Kulik, C. "Effects of Ability Grouping on Student Achievement". Equity and Excellence 23, (1987).

Lacey, C. The Socialization of Teachers. London: Methuen, 1977.

__________. Hightown Grammar. Manchester: Manchester University Press, 1970.

Lacey, R.A. (1988). Building the Watertable of Youth Employability: Collaboration to Support Children and Youth at Risk between Ages Nine and Fifteen. Washington: National Commission for Employment Policy. ERIC Document ED 303616, 1988.

Lake, S. Equal Access to Education: Alternatives to Tracking and Ability Grouping. Practitioner's Monograph, #2. Sacramento, CA.: California League of Middle Schools. ERIC Document ED 303553, 1988a.

__________. Scheduling the Middle Level School: Philosophy into Practice. Sacramento, CA.: California League of Middle Schools. ERIC Document ED 300920, 1988b.

Lang, P. (ed). New Directions in Pastoral Care. Oxford: Basil Blackwell, 1985.

Lawton, D. "Teaching Quality, Quality Teaching and the Culture of the School". Scottish Educational Review 19(1) (1987).

__________. Class, Culture and Curriculum. London: Routledge and Kegan Paul, 1975.

Lawton, S.; Leithwood, K.; Batcher, E.; Donaldson, E.; and Stewart R. Student Retention and Transition in Ontario High Schools. Toronto: Ministry of Education, 1988.

LeCompte, M. "The Culture Context of Dropping Out: Why Remedial Programs Fail to Solve the Problem". Education and Urban Society 19(3) (1987).

Lee, V.E., and Bryk, A.S. "Curriculum Tracking as Mediating the Social Distribution of High School Achievement". Sociology of Education 61(2) (1988), pp. 78-94.

Leithwood, K. (ed.) Planned Educational Change: A Manual for CRDI Concepts and Procedures. Toronto: Ontario Institute for Studies in Education, 1986.

Leithwood, K., et al. "Fostering Inequality in Ontario Secondary Schools: The Implementation of OSIS". OISE Field Development Newsletter 18(1) (1988), pp. 1-10.

Leithwood, K.; Lawton, S.; and Hargreaves, A. Recommendations Concerning Ontario Education Policy and Policy Making Process. A presentation to the Select Committee on Education of the Legislative Assembly of Ontario, September 1988. Toronto: Ontario Institute for Studies in Education, 1988.

Leithwood, K.; Cassie, B.; Cousins, B.; Hannay L.; Maynes, F.; Robinson, F.; Quirouette, P.; Seller, W.; Townsend, R.; and Miller, J. The Nature and Consequences of Selected Processes for Developing, Implementing and Institutionalizing Major Educational Policies. Toronto: Ministry of Education, 1987.

Leithwood, K.; Miller, J.; Ross S.; Maynes, F.; and MacKeracher, D. The Development of Ontario Schools: Intermediate and Senior Divisions -- 1984 (OSIS) and the Initial Phase of Its Implementation. Toronto: Queen's Printer of Ontario, 1987.

Levy, T. "Making a Difference in the Middle School", Social Education 52(2) (1988), pp. 104-106 .

Licata, V.F. "Creating a Positive School Climate at the Junior High School Level". Paper presented at the Annual Meeting of the Michigan Association of Middle School Educators. ERIC Document ED 280143, 1987.

Lieberman, A. (ed.) Building a Professional Culture in Schools. Columbia Teachers College Press, 1989.

Lieberman, A. "Collaborative Work", Educational Leadership (February 1986). pp. 4-8.

Liepmann, K. L. The Journey to Work. 2nd ed. London: Percy Lund Humphries Co. Ltd., 1943.

Ligon, G.D. "Preparing Students for Standardized Testing". New Directions for Testing and Measurement 19 (1983), pp. 19-27.

Lipsitz, J. Successful Schools for Young Adolescents. Carrboro, NC: University of North Carolina at Chapel Hill, Center for Early Adolescence. ERIC Document ED 240209, 1984.

Lipsitz, J., et al. Discipline and Young Adolescents: Issues in Middle Grade Education. Carrboro, NC: University of North Carolina at Chapel Hill, N.C.: University of North Carolina, Center for Early Adolescence. ERIC Document ED 252613, 1984.

Little, J.D. Student Evaluation Policy and Philosophy Statement. London, Ontario: The Board of Education for the City of London, 1987.

Little, J.W. "The Persistence of Privacy: Autonomy and Initiative in Teachers' Professional Relations". Paper presented at the annual meeting of the American Educational Research Association, San Francisco, March 1989.

__________. "Seductive Images and Organization Realities in Professional Development", Teachers' College Record 86(1) (1984), pp. 84-102.

Little, J.W., and Bird, T. Report on a Pilot Study of School-Level Collegial Teaming. San Francisco: Far West Laboratory for Educational Research and Development. ERIC Document ED 266540, 1984.

Lloyd, J. "The Opportunity of Private Sector Training". Vocational Education Journal 62(3) (1981), pp. 20-24.

Lounsbury, John (ed.) This We Believe. Columbus, OH: National Middle School Association. ERIC Document ED 226513, 1982.

Lyman, N., and Foyle, H.C. "Cooperative Learning in the Middle School". Paper presented at the Annual Kansas Symposium for Middle Level Education, February 1989. ERIC Document ED 302866, 1989.

Madden, N.A. and Slavin, R.E. "Effects of Cooperative Learning on the Social Acceptance of Mainstreamed Academically Handicapped Students". Journal of Special Education 17(2) (1983), pp. 171-182.

Maguire, J. An Outline of Assessment Methods in Secondary Education in Selected Countries. Edinburgh: Scottish Council for Research in Education, 1976.

Makins, V. "Why Cream of Sixth Go Sour". The Times Educational Supplement, 3243, July 29, 1977, p.3.

Manning, M.L., and Allen, M.G. "Social Development of Early Adolescence: Implications for Middle School Educators". Childhood Education 63(3) (1978).

Marjoram, K. "The APU and Assessment in the Middle Years". Education 3-13, 6(2) (1978), pp. 31-36.

Marlow, E. How Should School Student Achievement Be Determined ERIC Document ED 301582, 1988.

Marshall, D.G. "Closing Small Schools or, When is Small Too Small?" Education Canada 25(4) (1985), pp. 11-16.

Marx, R., and Grieve, T. "The Learners of British Columbia". British Columbia Royal Commission on Education, Vol.2. Victoria: Queen's Printer for British Columbia, 1988.

McCallum, D. "Educational Expansion, Curriculum Reform and Psychological Theory: Australia in the 1930's". Australian and New Zealand Journal of Sociology 22(2) (1986), pp. 225-237.

McCarthy, B. The 4MAT System: Teaching to Learning Styles with Right/Left Mode Techniques. Barrington, Ill.: Excel, Inc., 1980.

McClelland, D. Human Motivation. New York: Cambridge University Press, 1987.

McGanney, M.L., et al. "Ninth Grade Houses: The Program and its Impact in New York City Public High Schools". Paper presented at the Annual Meeting of the American Educational Research Association. ERIC Document ED 306284, 1989.

McLean, L.D. The Craft of Student Evaluation in Canada. Toronto: Canadian Education Association, 1985.

McNeil, L.M. "Contradictions of Control, Parts 1, 2, and 3". Phi Delta Kappan 69(5), (6), and (7) (1988).

McPartland, J. Balancing High Quality Subject-Matter Instruction with Positive Teacher-Student Relations in the Middle Grades: Effects of Departmentalization, Tracking and Block Scheduling on Learning Environments. Report No. 15. Centre for Research on Elementary and Middle Schools. Baltimore, MD: Johns Hopkins University. ERIC Document ED 291704, 1987.

McPartland, J.; Coldiron, J.; and Braddock, J. A Description of School Structures and Classroom Practices in Elementary, Middle, and Secondary Schools. Baltimore: Johns Hopkins University, 1987.

Measor, L., and Woods. P. Changing Schools. Milton Keynes: Open University Press, 1984.

Mei, D.M., et al. Institute for Career Exploration Program -- Summer 1987 Evaluation Report. New York: New York City Board of Education, 1988.

Mertin, P.; Haebich, E.; and Lokan, J. "Everyone Will Be Bigger Than Me: Childrens' Perceptions of the Transition to High School". Australian Educational and Developmental Psychologist 6(2) (1989), pp. 1-4.

Messick, S. The Criterion Problem in the Evaluation of Instruction. Princeton, NJ: Educational Testing Service, 1969.

Metz, M. "The American High School: A Universal Drama Amid Disparate Experience". Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, 1988.

Meyenn, R.J., and Tickle, L. "The Transition Model of Middle Schools: Two Case Studies". In Hargreaves, A., and Tickle, L. Middle Schools: Origins, Ideology and Practice. London: Harper and Row, 1980.

Middle School Development Committee (MSDC). Middle School Development Committee --- Final Report. North York: North York Board of Education, 1981.

Miles, Matthew B., and Huberman, A. Michael. Innovation Up Close: How School Improvement Works. New York: Plenum Press, 1984.

Milner, J.O. "Speaking Out: The Peripheral Curriculum". Clearing House 61(1) (1987), p. 4.

Milstein, M. (ed.) Schools, Conflict, and Change. New York: Teachers College Press, 1980.

Missouri State Department of Elementary and Secondary Education. Core Competencies and Key Skills for Missouri Schools: For Grades 2 through 10. Jefferson City, Missouri: Missouri State Department of Elementary and Secondary Education. ERIC Document ED 289584, 1986.

Moede, L., and Triscare, R. Looking at Chapter 2: 1985-6 Austin, TE: Austin Independent School District, 1986.

Morgan, Gerald. "The Place of School in the Maintenance of the Welsh Language". Comparative Education 24(2) (1988), pp. 247-255.

Moon, B. Comprehensive Schools: Challenge and Change. Windsor: NFER-Nelson, 1983.

Mortimore J., and Mortimore, P. 18 Secondary School Examinations. Bedford Way Papers. London: Institute of Education, 1984.

Mortimore, J.; Sammons, P.; Stoll, L.; Lewis, D.; and Ecob, R. School Matters. Berkeley: University of California Press, 1988.

Mougeon, R. "Retention of French among young Franco-Ontarians". Language and Society, (Spring 1984).

Mougeon, R., and Canale, M. "Maintenance of French in Ontario: Is education in French enough?" Interchange 9 (1978/79) pp. 30-39.

Mougeon, R., and Heller, M. "The Social and Historical Context of Minority French Language Schooling in Ontario". Journal of Multilingual and Multicultural Development 7(2-3) (1986).

Muro, J.J. "Children: The Last Minority Group". Canadian Counsellor 8(1) (1974), pp. 2-11.

Murphy, J., and Hallinger, P. "Equity as Access to Learning: Curricular and Instructional Treatment Differences". Journal of Curriculum Studies 21 (1989).

Murphy R., and Torrance, H. The Changing Face of Educational Assessment. Milton Keynes: Open University Press, 1988.

Mussio, J.J. "The School Curriculum: A National Concern?" Education Canada 20(1) (1980), pp. 11-15.

Nachmias, C. "Curriculum Tracking: Some of Its Causes and Consequences Under a Meritocracy." Comparative Education Review 24(1) (1980), pp. 1-20.

Nagy, P.; Traub, R.E.; and MacRury, K. Strategies for Evaluating the Impact of Province-Wide Testing. Toronto: Queen's Printer for Ontario, 1986.

National Foundation for Educational Research. Assessment, Certification and the Needs of Young People. Windsor: NFER-Nelson, 1988.

National Institute of Education. Testing, Teaching and Learning. Report of a Conference on Research on Testing. Washington, D.C.: National Institute of Education, 1979.

National Middle School Association. This We Believe. Columbus, Ohio: National Middle School Association, 1982.

National Panel on High School and Adolescent Education (NPHSAE). The Education of Adolescents. Washington: U.S. Dept. of Health, Education and Welfare. ERIC Document ED 130379, 1976.

Natriello, G. Evaluation Processes in Schools and Classrooms. Baltimore, MD: Johns Hopkins University. ERIC Document ED 294890, 1987.

__________. Organizational Evaluation Systems and Student Disengagement in Secondary Schools. St. Louis, MO: Washington University, Final Report to the National Institute of Education, 1982.

Neal, P.D. (ed.) Continuity in Education -- EDC Project Five. Birmingham, England: City of Birmingham Education Department, 1975.

Neufeld, J. "Time Maps: How Teachers Navigate Their Working Lives". Paper delivered to Canadian Society for Studies in Education Annual Conference, Victoria, B.C., 1990.

New Democratic Party. Education Discussion Paper No. 8. Toronto: Ontario New Democratic Party, 1988.

New York State School Boards Association (NYSBA). Meeting in the Middle: Directions in Schooling for Young Adolescents. Albany: New York State School Boards Association. ERIC Document ED 290207, 1987.

Nias, J.; Southworth, G.; and Yeomans, R. Staff Relationships in the Primary School. London: Cassells, 1989.

Nisbet, J.D., and Entwistle, N.J. The Transition to Secondary Education. London: University of London Press, 1969.

__________. Age of Transfer to Secondary Education. London: University of London Press, 1966.

Norfolk Middle School Headteachers. Discussion Document: Patterns of Liaison -- Middle to Secondary. Norwich, England: Norfolk Association of Middle School Headteachers, 1983.

North Carolina State Dept. of Public Instruction. Integrated Learning What-Why-How Instructional Services. Curriculum Series, No.1. Raleigh, N.C.: North Carolina State Department of Public Instruction, Instructional Services. ERIC Document ED 290759, 1987.

Northwest Regional Educational Lab. "Renne Intermediate School Features Personalized Instruction Profiles". Programs and Products 32, (1983).

Nuttall, L. D. Assessing Educational Achievement. Lewes: Falmer Press, 1986.

Oakes, J. "Beyond Tracking". Educational Horizons 65(1) (1986), pp. 32-35.

_______. Keeping Track: How Schools Structure Inequality. New Haven: Yale University Press, 1985.

Odetola, T.O., et al. "Organizational Structure and Student Alienation". Educational Administration Quarterly 8(1) (1972), pp. 15-26.

O'Donnell, P. "Catalan and Castilian as Prestige Languages: A Tale of Two Cities". Language Problems and Language Planning, 12(3) (Fall 1988), pp. 226-238.

O'Farrell, P.N., and Markham, J. The Journey to Work: A Behaviourial Analysis. Oxford: Pergamon Press, 1975.

Olson, J. Innovation in the Science Curriculum. London: Croom Helm, 1982.

Ontario Ministry of Education. A Handbook for Designing and Making the OAC1 Written Examination in English. Toronto: Ontario Ministry of Education, 1989.

__________________________. Curriculum Management. Toronto: Ontario Ministry of Education, 1988a.

________________________. First Report of the Select Committee on Education. Toronto: Queen's Printer, 1988b.

________________________. Education in the Junior Division: A Look at 42 Schools. Toronto: Ontario Ministry of Education, 1985.

________________________. Commission on the Future Development of the Universities of Ontario (The Bovey Commission). Toronto: Queen's Printer, 1984.

________________________. Ontario Schools: Intermediate and Senior Divisions -- Program and Diploma Requirements (OSIS). (Revised 1989). Toronto: Ontario Minstry of Education, 1984/1989.

________________________. Education in the Primary and Junior Divisions. Toronto: Ontario Ministry of Education, 1975.

________________________. The Formative Years. Toronto: Ontario Ministry of Education, 1975.

Organization for Economic Co-operation and Development. Adolescents and Comprehensive Schooling. Paris: OECD, 1987.

Osborne, K. Middle Years Sourcebook: Some Suggestions for the Education of Early Adolescents. Winnipeg: Manitoba Department of Education, 1984.

Ottawa Board of Education. Re: Implementation of Strategies for the Throne Speech Directions and a Blueprint for Education in the 1990s for the Ottawa Board of Education Schools. Ottawa, 1989.

Oxford Certificate of Educational Achievement (OCEA). The Personal Record Component: A Draft Handbook for Schools. Oxford: OCEA, 1984.

Palmer and Associates. Middle Years Education: Pearls for Cultivation. Saskatchewan Middle Years Association, 1989.

Palomares, U., and Ball, G. Grounds For Growth. Spring Valley, California: Palomares and Associates, 1980.

Pautler, A. and Schiavone, R. "A Three-Way Partnership". Vocational Education Journal 62(3) (1987), pp. 30-32.

Pike, T. "Science and Years 7 to 8 Interface". SASTA Journal, 832 (1983), pp. 25-28.

Pink, W. "Implementing An Alternative Program For At-Risk Youth: A School Within a School Model for School Reform". Paper presented at the annual meeting of the American Educational Research Association, 1988.

Pinkey, H.B. "Is it Time to Stop Busing?" American School Board Journal 168(10), (1981) pp. 21-23.

Plowden Commission, Children and Their Primary Schools. London: H.M. Stationery Office, 1967.

Pollard, A. The Social World of the Primary School. London: Cassells, 1985.

Powell, B. "Transition in Mathematics: Year 7 to 8". Paper presented to Mathematics Education Research Group of Australia, 1982.

Power, C., and Cotterell, J. Changes in Students in the Transition Between Primary and Secondary School. Education Research and Development Committee Report #27. Australian Government Publishing Service, 1981.

Pratt, D. "Characteristics of Canadian Curricula". Canadian Journal of Education 14(3) (1987), pp. 295-310.

Price, E. "Monitoring Attainment in the Welsh Language in Schools". Journal of Multilingual and Multicultural Development 1(1) (1980), pp. 41-48.

Pugh, W.C. "A Study of School Grade Organization: Policy Implications for Middle Schools". Paper presented at the Annual Meeting of the Eastern Educational Research Association. Miami Beach, FL. ERIC Document ED 296459, 1988.

Purkey, S.C., and Smith, M. "Effective Schools: a Review." Elementary School Journal 83 (1983), p. 4.

Quirouette, P.; Saint-Denis, O.; and Huot, N., Décrocheurs francophones. Une étude du dépistage des décrocheurs probables au sein des écoles secondaires françaises de l'Ontario, Etape II. Toronto: Ministère de l' Education, 1988.

Radwanski, G. Ontario Study of the Relevance of Education and the Issue of Dropouts. Toronto: Ontario Ministry of Education, 1987.

Ratsoy, E. W. Public Reactions to the Proposed Provincial Student Evaluation Policy. Edmonton: Alberta Education, 1983.

Rawers, L.J. Philomath's Comprehensive Program for Middle School Students. Eugene, OR.: Oregon School Study Council, University of Oregon. ERIC Document ED 244372, 1984.

Raymond, C.D. Career Education Infusion: A Review of Selected Curriculum Guides for the Middle School. Information Series, No. 211. Columbus, OH.: ERIC Clearinghouse on Adult, Career and Vocational Education and National Center for Research in Vocational Education, Ohio State University. ERIC Document ED 193531, 1980.

Resnick, D.P., and Resnick, L.B. Standards, Curriculum, and Performance: A Historical and Comparative Perspective. Educational Researcher 14(4) (1985), pp. 5-20.

Reumen, D.A. Effects of Between-Classroom Ability Grouping in Mathematics at the Transition to Junior High School. American Educational Research Association Connecticut, U.S.A., 1989.

Reynolds, D., and Sullivan, M. The Comprehensive Experiment. London: Falmer Press, 1987.

Richards, N.J. The Relationship Between Background Factors and Parental Interest in and Expectation of Schooling and the Satisfaction and Confidence in Transition. Australia: Master of Education Thesis, School of Education, Monash University, 1980.

Rimmington, G.T. "Evaluation in History and the Social Sciences: The Longitudinal Aspect and Its Problems". History and Social Science Teacher 12 (1977), pp. 207-211.

Rist, R. "Language and literacy: programmes for linguistic minorities in five countries". Centre for Educational Research and Innovation, Organisation for Economic Co-operation and Development. The Educational of Minority Groups. Aldershot, England: Gower Publishing Co. Ltd., 1983.

Rosenholtz, S. Teachers' Workplace. New York: Longman, 1989.

Rossman, G.; Corbett, H.; and Firestone, W. Professional Cultures, Improvement Efforts and Effectiveness: Findings from a Study of Three High Schools. Philadelphia: Research for Better Schools, 1985.

Rowntree, D. "The Side Effects of Assessment". In Finch, A., and Scrimshaw, P. Standards, Schooling and Education. London: Hodder and Stoughton, 1980.

Rudduck, J. Innovation, Involvement and Understanding. Milton Keynes: Open University Press, in press.

Rutter, M.; Maughan, B.; Mortimore, P.; Ousten, J.; and Smith, A. Fifteen Thousand Hours. London: Open Books, 1979.

Ryan, D.W. The Education of Adolescents in Remote Areas of Ontario. Toronto: Ontario Ministry of Education; Ontario Government Publications Services, 1976.

Saha-Lawrence, J. "School Attainment and Occupational Plan". Australian Journal of Education 26(3) (1982), pp. 245-65.

Sandeep, P., and Pushpa, M. "Deprivation and Cognitive Development in Children". Child Psychiatry Quarterly 14(2) (1981), pp. 47-54. Hyderabad, India: Osmania University.

San Diego City Schools. Proposal on Master Plan for Basic Education. San Diego, CA.: San Diego City Schools. ERIC Document ED 247348, 1983.

Sarason, I. G. "Understanding and Modifying Test Anxiety". In Anderson, E. and Helming, J. (eds). On Educational Testing. San Francisco: Josey-Bass, 1983, pp. 133-149.

Sarason, S. The Culture of the Schools and the Problem of Change. Boston: Allyn and Bacon, 1971.

Satterly, D. Assessment in Schools. Oxford: Blackwell, 1981.

Scarth, J. "Teaching to the Exam? -- The Case of the School Council History Project". In Horton, T. (ed.). GCSE: Examining the New System. London: Harper and Row, 1987.

Scherer, R.T., and Clary, J.R. Middle School Curriculum Guide. Raleigh, N.C.: Center for Occupational Education. North Carolina State University. ERIC Document ED 076754, 1973.

Schnelker, D., et al. Transitional Schools: Report of Evaluation. Des Moines IA: Des Moines Public Schools, Department of Evaluation, Research, and Testing. ERIC Document ED 280857, 1986.

Scottish Council for Research in Education (SCRE). Pupils in Profile. Edinburgh: Hodder and Stoughton, 1977.

Scriven, M. "How to Anchor Standards". Journal of Educational Measurement 15 (1978), pp. 273-275.

Seltzer, V. Adolescent Social Development: Dynamic Functional Interaction. Lexington, MA: Lexington Books., 1982

Shaw, S.M. "Teachers in Transition: The Need for Freedom Within". Education 95(2) (1974), pp. 140-144.

Shipman, M. Assessment in Primary and Middle Schools. London: Croom Helm, 1983.

Shultz, H. "The Middle Years Study -- Future of Division Three". Saskatchewan Educational Administrator 13(4) (1981), pp. 32-50.

Sigal, J.; Braverman, S.; Pilon, R.; and Baker, P. "Effects of Teacher-Led, Curriculum-Integrated Sensitivity Training in a Large School". Journal of Educational Research 70(1) (1976), pp. 3-9.

Siguan, M. "Education and Bilingualism in Catalonia". Journal of Multilingual and Multicultural Development 1(3) (1980), pp. 231-242.

Sigurdson, Sol E. Two Years on the Block Plan. Meeting the Needs of Junior High School Students. Final Report 1982. Edmonton: Alberta Department of Education, Planning and Research Branch, 1982.

Sikes, P.; Measor, L.; and Woods, P. Teacher Careers: Crises and Continuities. Lewes: Falmer Press, 1985.

Silberman, C.E. Crisis in the Classroom: the Revaluing of American Education. New York: Random House, 1973.

Silberman, C.E. (ed). The Open Classroom Reader. New York: Vintage Books, 1970.

Simmons, R.G., and Blyth, D.A. Moving into Adolescence: The Impact of Pubertal Change and School Context. New York: Aldine de Gruyter, 1987.

Simon, B. "The Primary School Revolution: Myth or Reality?" In Simon, B., and Willcocks, J. Research and Practice in the Primary Classroom. London: Routledge and Kegan Paul, 1981.

Simon, S. B. "Grades Must Go". Pennsylvania Education 3 (5) (1972), pp. 19-21.

Simons, M., and Erling, S. Writing Folders. Toronto: North York Board of Education, 1986.

Skilbeck, M. "Revitalizing the Core Curriculum". Journal of Curriculum and Supervision 4(3) (1989), pp. 197-210.

__________. School-Based Curriculum Development. London: Harper and Row, 1984.

Slavin, R. E. "Cooperative Learning and Student Achievement". Educational Leadership 46(2) (1988), pp. 31-33.

__________. "Developmental and Motivational Perspectives on Cooperative Learning: A Reconciliation". Child Development 58(5) (1987a), pp. 1161-1167.

__________. Student Teams: What Research Says to the Teacher. (2nd ed.) Washington, D.C.: National Education Association, 1987b.

__________. "Ability Grouping and Student Achievement in Elementary Schools: A Best-Evidence Synthesis". Review of Educational Research, 57, (1987c).

__________. "Cooperative Learning: Applying Contact Theory in Desegregated Schools". Journal of Social Issues 41(3) (1985), pp. 43-62.

__________. Cooperative Learning. Research in Teaching Monograph Series. New York: Longman Inc., 1983a.

__________. Team-Assisted Individualization: A Cooperative Learning Solution for Adaptive Instruction in Mathematics. Baltimore: John Hopkins University. Center for Social Organization of Schools. ERIC Document ED 232852, 1983b.

__________. Student Team Learning. Baltimore: John Hopkins University, Center for Social Organization of Schools, 1980.

Slavin, R. E., and Tanner, A. M. "Effects of Cooperative Reward Structures and Individual Accountability on Productivity and Learning". Journal of Educational Research 72(5) (1979), pp. 294-298.

Smedley, S.R., and Willower, D.J. "Principal's Pupil Control Behavior and School Robustness". Educational Administration Quarterly 17 (1981), pp. 40-56.

Snow, W.H.; Gilchrist, L.D.; Schilling, R.F.; Schinke, S.P; et al. Journal of Early Adolescence 6(2) (1986).

Sparrow, A. "Some Practical Ideas for Meeting the Needs of the Gifted Child in the Classroom". Gifted Education International 3(1) (1985), pp. 65-67.

Spelman, B.J. Pupil Adaptation to Secondary School. Belfast: Northern Ireland Council for Educational Research, 1979.

Spencer, C., and Allen, M.G. Grouping Students by Ability: A Review of the Literature. ERIC Document ED 302326, 1988.

Stansbury, D. "The Record of Personal Experience". In Burgess, T., and Adams, E. Outcomes of Education. London: MacMillan, 1980.

Statistics Canada. Education in Canada: A Statistical Review for 1985-6. Ottawa: Statistics Canada, 1983.

Steed, D. "Tired of School: Danish Disruptive Pupils and Ours". Cambridge Journal of Education 13(1) (1983), pp. 20-25.

Steele, C.A. "The Truths of Transescence". Principal 65(2) (1985), pp. 50-52.

Steer, D.R. (ed.). The Emerging Adolescent: Characteristics and Educational Implications. Fairborn, OH.: National Middle School Association. ERIC Document ED 198626, 1980.

Stelle, A., and Wallace, H. "Meeting Learning Needs of the Young Adolescent". Thrust for Educational Leadership 8(3) (1979), pp. 25-27.

Stenhouse, L. Curriculum Research and Development in Action. London: Heinemann, 1980.

Stennett, R.G. Student Evaluation Policy and Philosophy: A Survey of Principals. London, Ont.: The Board of Education for the City of London, 1987.

Stennett, R.G., and Isaacs, L. The Elementary to Secondary Transition: A Follow-up of "High Risk" Students. London, Ont: London Board of Education, 1979.

Stiggins, R. "Revitalizing Classroom Assessment: The Highest Instructional Priority". Phi Delta Kappan (1988), pp. 363-368.

Stiggins, R., and Bridgeford, N. "The Ecology of Classroom Assessment". Journal of Educational Measurement 22 (1985).

Stiggins, R.J.; Grisword, P.; and Frisbie, D. Inside High School Grading Practices. Portland, OR.: Northwest Regional Educational Lab. ERIC Document ED 279713, 1986.

Stillman, A., and Maychell, K. School to School. New Jersey: NFER-Nelson, 1984.

Strodl, P. "Ethnic Differences in Dealing with Experiences in Multiethnic Middle Schools". Paper presented at the Urban Educational Research Conference, Brooklyn, NY. ERIC Document ED 297044, 1988.

Sullivan, B.M. A Legacy for Learners: The Report of the Royal Commission on Education. Victoria, British Columbia, 1988.

Swales, T. Records of Personal Achievement: An Independent Evaluation of the Swinden RPA Scheme. London: School Council, 1980.

Task Force on Education of Young Adolescents (TFEYA). Turning Points: Preparing American Youth for the 21st Century. New York: Carnegie Council on Adolescent Development, 1989.

Task Group on Assessment and Testing. Department of Education and Science and the Welsh Office. London: HMSO, 1987.

Taylor, D.H., and Rickel, A.U. "An Analysis of Factors Affecting School Social Integration". Journal of Negro Education 50(2) (1981), pp. 122-133.

Taylor, M., and Garson, Y. Schooling in the Middle Years. Trentham: Trentham Books, 1982.

Thomas, A., and Diamond, N. Changes in Secondary Education and Their Implications for Continuing Education in Canada. Paris: UNESCO, 1973.

Thomas, C. An Ethnographic Study of Sixth Form Life. M. Phil. Thesis. Department of Educational Studies, University of Oxford, England, 1984.

Thomas, N. Improving Primary School. London: ILEA, 1984.

Thornburg, H.D. "Developmental Characteristics of Middle Schoolers and Middle School Organization". Paper presented at the Annual Meeting of the American Educational Research Association. Boston, MA.: ERIC Document ED 192443, 1980.

____________. "The Total Early Adolescent in Contemporary Society". High School Journal 65(8) (1982), pp. 272-278.

Tizard, B. "Problematic Aspects of Nuclear Education". In Bishop of Salisbury White, P.; Andrews, R.; Jacobsen, B.; and Tizard, B. Lessons before Midnight: Educating for Reason in Nuclear Matters. Bedford Way, Paper No.19. Institute of Education: University of London, 1985.

Toepfer, C.F. "Curriculum Issues for Middle-Level Schools". National Forum 67(3) (1987), pp. 17-18.

____________. "A Realistic Expectation for Cognitive Growth During Transescence". Paper presented at the Annual Meeting, Association for Supervision and Curriculum Development, Houston, TX. ERIC Document ED 141316, 1977.

____________. "Curriculum Design and Neuropsychological Development". Journal of Research and Development in Education 15(3) (1982), pp. 1-11.

Tomkins, G.S. A Common Countenance: Stability and Change in the Canadian Curriculum. Scarborough, Ontario: Prentice-Hall, 1986.

Torrance, H. "What Can Examinations Contribute to School Evaluation?" Educational Review 38(1) (1986).

Toyama, H. "The Process of the Establishment of Education Rooted To Community". Bulletin of the Faculty of Education 21(13) (1975), pp. 3-143.

Traub, R., and Nagy, P. Teacher Assessment Practices in a Senior High School Mathematics Course. Toronto: Ontario Institute for Studies in Education, Toronto, 1988.

Traub, R. E.; Wolfe, R.; Wolfe, C.; Evans, P.; and Russell, H. H. Secondary-Postsecondary Interface Project II: Nature of Students. Volumes I and II. Toronto: Ministry of Education and Ministry of Colleges and Universities, 1977.

Trebilco, G.R.; Atkinson, E.P.; and Atkinson, J.M. "The Transition of Students from Primary to Secondary School". Paper presented at the Annual Conference of the Australian Association for Research in Education, Canberra, November 1977.

Trimble, K., and Sinclair, R. "On the Wrong Track: Ability Grouping and the Threat to Equity". Equity and Excellence 23 (1987).

Troman, G. "Testing Tensions: The Politics of Educational Assessment". British Educational Research Journal 15(3) (1989), pp. 279-295.

Turgeon, P.P. "Some Vocational Counselling Construct Underpinnings within the CHOICES System". Canadian Counsellor 13(3) (1979).

Turner, G. The Social World of the Comprehensive School. London: Croom Helm, 1983.

Tye, B. "The Deep Structure of Schooling". Phi Delta Kappan December (1987), pp. 281-284.

______. Multiple Realities: a Study of 13 American High Schools. Lanham: University Press of America, 1985.

Tye, K. The Junior High: Schools in Search of a Mission. Lanham: University Press of America, 1985.

United States National Commission on Excellence in Education. A Nation at Risk: The Imperative for Educational Reform. Washington, D.C.: United States Department of Education, 1983.

Utah State Office Of Education. Elementary and Secondary Core Curriculum. Field Trial Document, 1984-85. Salt Lake City, UT.: Utah State Office of Education. ERIC Document ED 258944, 1985.

Vars, G.F. "These Are the Times That Try Men's Souls: Some Thoughts on the Core Curriculum Movement". Paper presented at The Annual Meeting of the National Association for Core Curriculum, Pikesville, MD.: ERIC Document ED 217540, 1981.

_________. New Knowledge of the Learner and His Cultural Milieu, Implications for Schooling in the Middle Years. Toledo, Ohio: University of Toledo. ERIC Document ED 016267, 1967.

Wagner, H. "Discipline in Schools is Inseparable from Teaching". Education 103(4) (1983), pp. 390-394.

Wahlstrom, M., et al. Assessment of Student Achievement: Evaluation of Student Achievement at the Intermediate Level. Toronto: Ontario Institute for Studies in Education, 1977.

Wahlstrom, M., and Darley, R. Assessment of Student Achievement. Ontario Ministry of Education, Toronto, 1976.

Wake, R.; Marbeau, V.; and Peterson, A. Innovation in Secondary Education in Europe. Council for Cultural Cooperation, 1979.

Ward, B.A., et al. The Years Between Elementary School and High School: What Schooling Experiences do Students Have? Washington, DC: National Commission on Excellence in Education. ERIC Document ED 228239, 1982.

Ward, F., and Cooper, D. Basic English: Handbook. The Ontario Assessment Instrument Pool. Toronto: Ontario Ministry of Education, 1989.

Watson, K. Curriculum Continuity: Lessons to Be Learnt from Other Societies. Westminister Studies in Education 11 (1988), pp. 81-98.

Wayne Township Schools. Introduction to Vocations: High Tech Focus. Final Report 1984-85. NJ: Wayne Township Schools, 1985.

Weatherford, M.S. "The Politics of School Busing: Contextual Effects and Community Polarization". Journal of Politics 42(2) (1980), pp. 747-767.

Webber, C. F. School Board Member Perceptions of the Utility and Importance of Student Evaluation Information in Alberta, 1984.

Wedell, K. "The New Act: A Special Need for Vigilance". British Journal of Special Education 15(3) (1988), pp. 98-101.

Wehlage, G., and Rutter, R. "Dropping Out: How Much Do Schools Contribute to the Problem?" Teachers College Record 87(3) (1986).

Westbury, I. "Conventional Classrooms, Open Classrooms, and the Technology of Teaching". Journal of Curriculum Studies 5 (1973), p. 2.

Weston, P. Negotiating the Curriculum. Windsor: NFER-Nelson, 1979.

Wheelock, A. The Way Out: Student Exclusion Practices in Boston Middle Schools. Boston: Massachusetts Advocacy Center. ERIC Document ED 303529, 1986.

White, P. "Facing the Nuclear Issues: A Task for Political Education in Bishops of Salisbury". In Andrews, R.; Jacobson, B.; and Tizard, B. Lessons Before Midnight; Educating for Reason in Nuclear Matters. Bedford Way Paper No. 19. London: Institute of Education, University of London, 1984.

Whitty, G. Sociology and School Knowledge. London: Methuen Books, 1985.

Wideen, M., and Pye, I. The Struggle for Change in a Complex-Setting: A Literature Review of the High School. Research study of high schools for School District No. 36. Surrey, B.C.: Simon Fraser University, 1989.

Wiles, J., et al. "Miracle on Main Street: The St. Louis Story". Educational Leadership 40(2) (1982), pp. 52-53.

Wiles, J.W., and Bondi, J.W. Making Middle Schools Work. Alexandria, VA: Association for Supervision and Curriculum Development. ERIC Document ED 277147, 1986.

Williams, Colin H. "Wisdom, Survival and the Turning of the Screw: Welsh Culture in the Eighties". Journal of General Education 34(4) (1983), pp. 319-329.

Williams, R. The Long Revolution. London: Chatto and Windus, 1961.

Wilson, E. Sociology: Rules, Roles, and Relationships. Homewoood, Il: Dorsey Press, 1971.

Willis, P. Learning to Labour. London: Saxon House, 1977.

Wilson, J., and Taylor, B.L. "The Effects of MACOS on Intermediate-Grade Children's Attitudes". Education 98(3) (1978), pp. 359-364.

Wilson, R. "Evaluating Student Achievement in an Ontario High School". The Alberta Journal of Educational Research XXXV (1989).

Wilson, R.; Rees, R.; and Connock, M. "Classroom Practices in Evaluation: A Progress Report from the Ecology of Evaluation Project". Research Forum 4 (1989), School District #36, Surrey, British Columbia.

Wood, K. "Fostering Cooperative Learning in Middle and Secondary Level Classrooms". Journal of Reading 31(1) (1987), pp. 10-19.

Wood, R., and Power, C. "Have National Assessments Made Us Wiser about Standards?" Comparative Education 20 (1984), pp. 307-321.

Woods, P. The Divided School. London: Routledge and Kegan Paul, 1979.

Young, M.F.D. (ed.) Knowledge and Control, London: Collier-MacMillan, 1971.

Youngman, M.B., and Lunzer, E.A. Adjustment to Secondary Schooling. Nottingham: Nottinghamshire County Council and Nottingham University School of Education, 1977.

Zaragoza, F., and Huber, R. "Customized Training with CBOs". Vocational Education Journal 62(3) (1987), pp. 32-34.